DOCUMENT RESUME

ED 135 640 SE 022 024

AUTHOR	Heitowit, Ezra D., Comp.; And Others
TITLE	Science, Technology, and Society: A Guide to the Field. Directory of Teaching, Research, and Resources in the U.S.
INSTITUTION	Cornell Univ., Ithaca, N.Y. Program on Science, Technology, and Society.
SPONS AGENCY	National Science Foundation, Washington, D.C.
REPORT NO	STS-77-001
PUB DATE	Dec 76
GRANT	NSF-GY-8325
NOTE	803p.; Contains numerous small print
EDRS PRICE	MF-$1.50 HC-$43.53 Plus Postage.
DESCRIPTORS	Bibliographies; Curriculum; *Directories; *Higher Education; *Institutions; *Research; Resources; Science Education; *Sciences; *Technology
IDENTIFIERS	*Science Technology and Society

ABSTRACT

The information in this volume is derived chiefly from a 1975 national survey of academic activities in the interdisciplinary area of science, technology, and society (STS), a general term meant to encompass such topical designations as science and technology policy, ethics and values in science and technology, science and humanities, technology assessment and forecasting, technology and human affairs, etc. Teaching and research activities are listed for nearly 400 U.S. colleges and universities, including descriptions of over 2300 courses and over 100 formal programs, institutes, centers, etc. STS-related activities are listed for selected professional organizations, research corporations, government agencies, public interest groups, and foundations. Separate listings of teaching materials, bibliographic resources, and periodicals are also included. (Author)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED155640

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Science, Technology, and Society: A Guide to the Field

Directory of Teaching, Research, and Resources in the U.S.

Compiled and edited by:

EZRA D. HEITOWIT
JANET EPSTEIN
GERALD STEINBERG

Program on Science, Technology, and Society
CORNELL UNIVERSITY
ITHACA, NEW YORK 14853

STS-77-001

SE 022 024

SCIENCE, TECHNOLOGY, AND SOCIETY:

A GUIDE TO THE FIELD

Directory of Teaching, Research, and Resources in the U.S.

Compiled and Edited by

Ezra D. Heitowit

Janet Epstein

Gerald M. Steinberg

Program on Science, Technology, and Society
Cornell University
628 Clark Hall
Ithaca, NY 14853

DEC 1976

This material is based upon research supported by the National Science Foundation under Grant No. GY-8325.

Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the National Science Foundation.

This work has also been supported by funds from Cornell University derived from foundations and industry.

TABLE OF CONTENTS

Page

Preface v
How to Use This Guide xi

I. Academic Institutions 1
- -Academic Institution Code List 2
- A. Courses, Colloquia/Lecture Series, Future Plans 29
  - -Abbreviations used in course listing 30
  - -Format for course listing 30
- B. Course Literature List 171
- C. Program Profiles 215
- D. Incomplete List of Faculty Research Interests 319

II. Research, Government, and Professional Institutions 379
- A. Research Institutes: A Selected List 381
- B. Government Agencies: A Selected List 395
- C. Professional Organizations: A Selected List 413
- D. Public Interest Organizations: A Selected List 433
- E. Foundations: A Selected List 441

III. Resources 449
- A. Curriculum Materials and Publications Available from Academic Institutions 451
- B. Periodicals: A Selected List 485
- C. Newsletters and Bulletins: A Selected List 505
- D. Recent Bibliographies: A Selected List 515
- E. Guide to Resources for Audiovisual Materials: A Selected List 523
- F. Resources from Specialized Publishers, Curriculum Projects, and Organizations: A Selected List 531

Course Index 537
Research Index 563
Index to Research, Government, and Professional Institutions 573

PREFACE

Teaching and research on the interaction of science and technology with society have been growing rapidly in higher education in recent years. This growth has taken place despite the apparent onset of a period of austerity and, more significantly, in the absence of a central organizational or intellectual locus. In order to provide a clearer picture of the emergence of an important interdisciplinary area of study, we have undertaken the task of documenting academic activities in "science, technology, and society" (STS), a general term meant to encompass such topical designations as science and technology policy, ethical and human value implications of science and technology, science and humanities, technology assessment and forecasting, technology and human affairs, etc.

We have two major objectives in producing this guide. The first is to illustrate the current level of teaching and research activity in the STS area at U.S. colleges and universities, and to indicate educational resources for STS studies available both within and outside the academic community.

The second objective is to facilitate communication and cooperation among educators and scholars in the various disciplines and specialties associated with STS studies. The need to establish networks, or "invisible colleges," and to encourage the development of an intellectual framework for the area has been recognized. This volume is designed to aid those colleagues involved in such organizational efforts by providing them with a roster of individuals and groups and their associated scholarly interests.

Our survey of STS activities was undertaken in conjunction with an assessment, sponsored by the National Science Foundation, of the current state of STS instruction and the need for and availability of curriculum materials. The survey was intended to update and broaden the scope of a similar investigation by the staff of the Science Policy Research Division of the Congressional Research Service (U.S. Congress, 1973). An earlier international survey had also been carried out by UNESCO (1971). Our task was to obtain more detailed information on courses and programs. We were particularly interested in learning what types of teaching materials are used, how programs are conceived and organized, and which student and faculty constituencies are involved.

The information on courses and programs contained in this guide is derived from questionnaires mailed to all colleges and universities in the U.S. Forms were mailed to chief academic officers at each institution as well as program directors and many individuals known to our staff to be involved in STS studies. In order to investigate activities in various professional schools, we augmented our survey by mailing forms to the deans of all U.S. schools of law, medicine, and public health.

Despite our aim of thoroughness, we could not realistically hope to receive responses from all institutions nor reach all of those involved in STS studies. We have received and include in this volume information, varying in degree of detail and completeness, on approximately 2300 courses from nearly 400 institutions.

Survey findings indicate not only a rapid growth in the number of STS teaching and research programs during the last ten years, but increasing diversity as well. Individual courses and formal programs range in objectives from liberal education to professional training, and range in academic orientation from public policy to humanistic aspects. Given the lack of a commonly accepted definition of STS studies, this diversity gives rise to the problem of how to limit the domain of the inventory without being arbitrary. On the one hand, we have adopted a broader conception of STS than just science policy studies. However, we do not find it practical to exhaustively document courses in the fields of economics, history, philosophy, political science, or sociology that deal with science and technology, nor do we intend to document those science and engineering courses that marginally include societal implications. Yet there are individuals and groups active in studies of the interaction of science and technology with contemporary society who choose particular disciplinary perspectives, be they historical, philosophical, economic, political, or sociological, and we do attempt to represent these perspectives.

Because of the ambiguity in setting boundaries for STS studies, we decided to err on the side of inclusion when editing survey responses (at least in deference to respondents who took the time required to describe their activities). Furthermore, in order that it serve a wide and diverse audience (faculty, students, administrators, foundations, etc.), we did not want to unnecessarily restrict the guide's scope. It must be pointed out, however, that academic and professional activities in certain related fields have recently been well documented, notably: history of science (Schallenberg, 1974; History of Science Society, Committee on Undergraduate Education in the History of Science, 1975), policy studies (Nagel and Neef, 1976), research on growth (Woodrow Wilson International Center for Scholars, 1974), environmental studies (Quigg, 1973), and ethical and human value implications of science and technology (Blanpied and Holton, 1974). The user of this guide is advised to consult these references for more complete information on these fields.

In the area of environmental studies, we have chosen to exclude courses and programs dealing exclusively with basic environmental science, but include those involving environmental law, policy, ethics, impact statements, etc.

We have perhaps been most successful in representing the formal academic programs in the STS area, both in terms of their course offerings and descriptions of their organizational characteristics. A second questionnaire was mailed to the directors of all formal programs identified from responses to our first questionnaire. From this second survey, we have produced the section of this guide entitled "Program Profiles," which includes program objectives, institutional arrangements, degrees offered, future plans, etc., for 132 programs.

While it would have been desirable to include data on an international scale, limited time and resources have restricted the geographic domain of our survey to the U.S. The reader interested in groups outside the U.S. should refer to appropriate international directories (e.g., UNESCO, 1971; Maison des Sciences de l'Homme and University of Sussex, 1975; Baitsch, et al., 1973).

An additional caveat concerns the possible obsolescence of some of the information in this guide. Most of the course data were collected during early 1975 and the program information during late 1975. As a result of rapid developments in the STS area, and the normal delay in publishing our results, one should not be surprised if the most recent innovations are not reported here. Indications of activities to be implemented appear as "Future Plans" at the end of each institution's course and colloquium list.

Our compilation of resources for teaching and research in STS studies has several components. A list of readings used in courses has been generated from the more complete survey responses, resulting in a rather lengthy and fascinating (though diffuse) bibliography. In separate sections we have listed curriculum materials and related documents available from individual teachers and university programs, and sources of information on commercially available print and audiovisual materials. We have also compiled a list of recent bibliographies, and a selected and annotated list of periodicals and newsletters.

From communications with selected groups outside the university community, we have included descriptions of the STS-related activities of a number of research corporations, government agencies, professional organizations, public interest groups, and private foundations. Where possible, we indicate relevant publications and other resources available from these groups.

The data contained in this guide, as well as information from site visits to selected programs and from workshops and conferences, will be incorporated in an analysis of the present state and future development of STS studies. These findings will be presented in a separate document.

The Cornell STS Program welcomes comments on this guide. We would be particularly interested to know if it is a useful resource and how it could be improved.

We should like to thank the many individuals who, in various ways, contributed to the production of this volume, particularly the survey respondents for providing us with descriptions of their activities and program directors for providing both detailed information on program characteristics and thoughtful comments on the development of STS studies. A special note of thanks is due the members of the project steering committee, Dr. Lynton K. Caldwell (Indiana University), Dr. Don E. Kash (University of Oklahoma), Dr. J.C. Mathes (University of Michigan), Dr. Rustum Roy (Pennsylvania State University), and Dr. Dorothy Zinberg (Harvard University), for their guidance and encouragement, and to

Dr. Raymond Bowers and Dr. Stuart M. Brown, Jr. of the Cornell STS Program for continuing counsel throughout the project. We also wish to express our graditude to Mr. Robert Linden of the Cornell STS staff for his editorial advice, and to Professor Brenton Stearns (Hobart and William Smith Colleges) and Mr. Lyle Anderson, Cornell graduate assistant, for their help in the compilation of the data.

We wish to express our indebtedness to the National Science Foundation for its support in this step toward providing an information base for an important and rapidly developing area of study.

References

Baitsch, Helmut, Fliedner, Theodor M., Kreutzkam, Joachim B., and Speigel-Rösing, Ina S. Memorandum zur Förderung der Wissenschaftsforschung in der Bundesrepublik Deutschland. Essen: Stifterverband für die Deutsche Wissenschaft, December 1973.

Blanpied, William A., and Holton, Gerald, comps. "The Ethical and Human Value Implications of Science and Technology: A Preliminary Directory Reviewing Contemporary Activity," Newsletter 8 of the Program on Public Conceptions of Science, Cambridge, MA: Harvard University, June 1974.

Heitowit, Ezra D. "Science, Technology, and Society--A Survey of Current Academic Activities." Presented at the Annual Meeting of the American Association for the Advancement of Science, February 20, 1976. Ithaca, NY: Cornell University Program on Science, Technology, and Society. Mimeo.

History of Science Society. Committee on Undergraduate Education in the History of Science. Report on Undergraduate Education in the History of Science, December 1975. Available from: Professor Hl Sharlin, Department of History, 603 Ross Hall, Iowa State University, Ames, IA 50011.

Maison des Sciences de l'Homme and University of Sussex. Academic Guide to Courses in Science Studies: France-United Kingdom. Maison des Sciences de l'Homme, 54, Bd Raspail, 75006 Paris, France; University of Sussex, History and Social Studies of Science, Falmer, Brighton, BN1 9QH, England; 1975.

Nagel, Stuart, and Neef, Marian, eds. The Policy Studies Directory. Policy Studies Organization, University of Illinois, Urbana, IL 61801; 1976.

Quigg, Philip W., ed. World Directory of Environmental Education Programs. New York and London: RR Bowker Co., 1973.

Shallenberg, Richard H. "A Guide to Graduate Study and Research in the History of Science, Technology, and Medicine." Offprint. Available from: ISIS (History of Science Society journal). ISIS Business Office, Science History Publications, 156 5th Ave., New York, NY 10010; 1974.

UNESCO. Division of Science and Technology Policies. Science Policy Research and Teaching Units (Europe and North America), Science Policy Studies and Documents No. 28. Paris: The Unesco Press, 1971.

U.S. Congress. House. Committee on Science and Astronautics. Subcommittee on Science, Research, and Development. *Teaching and Research in the Field of Science Policy--A Survey*, 92nd Cong., 2nd sess., December 20, 1972, staff study. Washington, DC: USGPO, 1973.

Woodrow Wilson International Center for Scholars. *Research on Growth: An Inventory of Efforts in the United States and Elsewhere* (preliminary edition). Washington, DC: Woodrow Wilson International Center for Scholars, March 1974.

HOW TO USE THIS GUIDE

The guide is divided into three parts: Academic Institutions; Research, Government, and Professional Institutions; and Resources. The first two sections are indexed at the end of the volume.

I. Academic Institutions

Part I contains four separate sections: descriptions of college and university courses, colloquia/lecture series, and future plans; a course literature bibliography; profiles of formal interdisciplinary programs; and a catalog of faculty research interests.

In each section, institutions are ordered alphabetically by name within each state (which are also ordered alphabetically). The institutions have been numbered consecutively with four-digit code numbers. A list of institutions (so ordered) and their respective code numbers appears at the beginning of Part I. This list also indicates whether an institution has a formal program, research activities, or available curriculum materials listed in the guide.

Each entry (courses, program profiles, research interests) under each institution has been assigned a code number consisting of the four-digit institution code number as a prefix, followed by a letter ("c" for course, "p" for program, "r" for research interest), followed by a two-digit number. The four-digit institution prefix provides easy cross-referencing between the course, program, and research sections. The entries within a given institution are numbered consecutively according to the last two digits.

A. Courses, Colloquia/Lecture Series, Future Plans

Each institution's entry begins with a listing of formal programs (if any) followed by abbreviations specific to that institution. Programs appearing in the profile section have associated code numbers indicated.

To make each course entry as concise as possible, standard abbreviations have been used. A list of abbreviations and a sample course entry format appear at the beginning of this section.

Courses within each institution have been arranged alphabetically by the primary sponsoring department. Besides course titles and brief descriptions, data may include course materials used, names of teachers, number of students, level, number of times offered, and cosponsoring departments or programs.

An index to courses appears at the end of the volume (see below).

Specific readings for courses are identified in the course entry only by the author's last name. Full bibliographic citations for the readings appear in the following section entitled "Course Literature List" (see below).

Colloquia and lecture series (if any) follow immediately after the courses for each institution. Future plans (if any) follow the colloquia/lecture series.

B. Course Literature List

The readings are given full bibliographic citations (whenever possible) and are arranged alphabetically by author. This section could serve as a broad bibliography for the STS area.

C. Program Profiles

The descriptions of formal interdisciplinary programs follow a standardized format with the major headings: History, Degrees Offered, Funding, Institutional Arrangements, Curriculum, and Constituency.

D. Faculty Research Interests

Individual researchers and their interests are grouped by departments and programs (no specific order). An index to faculty research interests appears at the end of the volume (see below).

II. Research, Government, and Professional Institutions

Part II includes brief descriptions of selected institutions, including publications available from them. It is divided into five sections: Research Institutes (includes non-profit "think tanks), Government Agencies, Professional Organizations (or Societies), Public Interest Groups, and Foundations. Entries in each section are arranged alphabetically by institution name.

III. Resources

Part III is divided into six sections.

A. Curriculum Materials and Publications Available from Academic Institutions

Available materials are listed by institution. The institutions are ordered as in the first part of the volume. Materials associated with specific courses are listed with the course code number and title for cross-reference to the course description section. The type of course material and the person to contact are indicated whenever possible. Other documents and publications are listed following the course-specific materials.

B. Periodicals

This is a selected, annotated listing of English language journals and other serials. The entries are arranged alphabetically by title. Subscription information is given wherever possible.

C. Newsletters and Bulletins

This is a selected, annotated listing of serial communications of various academic, professional, commercial, and governmental organizations. The entries are arranged alphabetically by title.

D. Recent Bibliographies

This is a selected, annotated listing of bibliographies published within the last ten years. The entries are arranged alphabetically by author.

E. Guide to Resources for Audiovisual Materials

This section includes individual materials as well as catalogs, reference guides, etc. The entries are arranged alphabetically by title.

F. Resources from Specialized Publishers, Curriculum Projects, and Organizations

This section identifies groups that offer a variety of print and non-print materials or resource guides to such materials. The entries are arranged alphabetically by title or resource.

Index

The index is divided into three parts.

Course Index

A meaningful classification of courses depends, to a large extent, on the completeness and accuracy of the course descriptions. Inspection of the course listing in the first section shows it to be quite variable in content, ranging from little more than course titles to detailed descriptions including course materials used and other data.

Within these limitations, using the available information courses have been classified according to major categories called "aspects" and minor categories called "subject areas" (within science and technology). The descriptors used for the aspects (major headings) are:

Economics, Business, Diffusion of Innovations
General or Cultural Impact
Forecasting, Technology Assessment, Futures
History
International Aspects, Technology Transfer

Law, Legal Aspects
Literature, Art
Philosophy, Religion, Ethics, Values
Policy, Socio-Political Aspects, Decision Making
Sociology, Structure, Organization, Process
Special Problems, Selected Topics, Case Studies, etc. (with a combination of aspects)

Many courses have been assigned two aspects, whenever appropriate, and are thus cross-listed in the index.

Under each major heading are the minor headings, descriptors that denote either the broad area of science and technology or a special topic area for each course. These include:

- General (or non-specific) Science/Technology
- Life Sciences, Biotechnology
- Social Sciences (includes population)
- Special Topic Areas
  - agriculture, food
  - arms control, national security, etc.
  - biomedical ethics/problems
  - communications, computers, and cybernetics
  - education, media, public understanding
  - energy, resources
  - environment (includes environmental impact statements when appears under aspect "Policy, Socio-Political Aspects, Decision Making")
  - management, administration
  - marine affairs, oceans
  - transportation
  - urban affairs

Courses are identified in the index by their four-digit institutional prefix followed by their two-digit course number within the institution. Page locations for the courses are not given as the consecutive code-numbering scheme of the course section facilitates easy referral.

Research Index

Faculty research interests have been classified and indexed according to the same set of major and minor categories employed in the course index, with the exception that the aspect "Special Problems, Selected Topics, Case Studies, etc." has been omitted. The research interests have been identified in the index by their four-digit institutional prefix followed by their two-digit research number within the institution, providing easy access to specific listings in the faculty research section.

Index to Research, Government, and Professional Institutions

Agencies, corporations, foundations, organizations, etc., are listed alphabetically by title and located by page number.

No index has been prepared for the Resources part of the guide.

I. ACADEMIC INSTITUTIONS

ACADEMIC INSTITUTION CODE LIST

The following academic institution code numbers are used throughout the guide. All academic institutions listed have entries in the course section. Entries in other sections are indicated on the code list as follows:

p = program profile
r = research interest listing
m = curriculum materials available

ALABAMA

0010	Auburn University Auburn, AL 36830			
0020	University of Alabama University, AL 35486			

ARIZONA

0030	Arizona State University Tempe, AZ 85281		r	m
0040	University of Arizona College of Law Tucson, AZ 85721		r	

ARKANSAS

0050	Arkansas College Batesville, AR 72501			

CALIFORNIA

0060	American River College Sacramento, CA 95841			
0070	California Institute of Technology Pasadena, CA 91125		r	m
0080	California Polytechnic State University San Luis Obispo, CA 93407			
0090	California State College, Dominguez Hills Dominguez Hills, CA 90747	p		
0100	California State College, Stanislaus Turlock, CA 95380	p	r	
0110	California State University, Los Angeles Los Angeles, CA 90032			
0120	The Claremont Colleges Claremont, CA 91711		r	
0130	Claremont Graduate School Claremont, CA 91711		r	m
0140	Harvey Mudd College of the Claremont Colleges Claremont, CA 91711		r	m

0150	Dominican College of San Rafael San Rafael, CA 94901			
0160	Immaculate Heart College Los Angeles, CA 90027			
0170	La Verne College La Verne, CA 91750			
0180	Loyola Marymount University Los Angeles, CA 90045			
0190	Loyola University School of Law Los Angeles, CA 90015			m
0200	Menlo College Menlo Park, CA 94025			
0210	Merced College Merced, CA 95340			
0220	Occidental College Los Angeles, CA 90041			
0230	Palomar College San Marcos, CA 92069			
0240	Rio Hondo College Whittier, CA 90608			
0250	San Francisco State University San Francisco, CA 94132	p	r	m
0260	San Jose State University San Jose, CA 95192	p	r	m
0270	Stanford University Stanford, CA 94305	p	r	m
0280	University of California, Berkeley Berkeley, CA 94720	p	r	m
0290	University of California, Davis Davis, CA 95616		r	
0300	University of California, Irvine Irvine, CA 92664			
0310	California College of Medicine University of California, Irvine Irvine, CA 92664			
0320	University of California, Los Angeles Los Angeles, CA 90024		r	m

0330 University of California, Los Angeles, School of Law
Los Angeles, CA 90024

0340 University of California, Los Angeles, School of Medicine p r m
Los Angeles, CA 90024

0350 University of California, Riverside
Riverside, CA 92502

0360 University of California, San Diego p r
La Jolla, CA 92037

0370 University of California Medical Center p r m
San Francisco, CA 94143

0380 University of California, Santa Barbara r
Santa Barbara, CA 93106

0390 University of California, Santa Cruz r
Santa Cruz, CA 95064

0400 University of the Pacific p
Stockton, CA 95211

0410 University of Southern California p r m
Los Angeles, CA 90007

0420 Westmont College
Santa Barbara, CA 93108

COLORADO

0430 Colorado State University r
Fort Collins, CO 80523

0440 Regis College
Denver, CO 80221

0450 University of Colorado p r
Boulder, CO 80302

0460 University of Colorado
Denver, CO 80202

0470 University of Denver p r m
Denver, CO 80210

CONNECTICUT

0480 Albertus Magnus College r m
New Haven, CT 06511

0490	Housatonic Community College Bridgeport, CT 06608			
0500	Mohegan Community College Norwich, CT 06360			
0510	Rensselaer Polytechnic Institute of Connecticut, Inc. Hartford, CT 06120			
0520	United States Coast Guard Academy New London, CT 06320			m
0530	University of Connecticut School of Law West Hartford, CT 06117		r	
0540	Wesleyan University Middletown, CT 06457	p		
0550	Western Connecticut State College Danbury, CT 06810			
0560	Yale University New Haven, CT 06520	p	r	
0570	Yale University Law School New Haven, CT 06520	p	r	

DELAWARE

0580	University of Delaware Newark, DE 19711	p	r	m

DISTRICT OF COLUMBIA

0590	The American University Washington, DC 20016	p		
0600	Georgetown University Washington, DC 20057	p	r	m
0610	George Washington University Washington, DC 20052	p	r	m
0620	George Washington University School of Law Washington, DC 20052			
0630	Howard University Washington, DC 20059		r	
0640	The National War College Washington, DC 20319			m

FLORIDA

0650	Florida Agricultural and Mechanical University Tallahassee, FL 32307		r	
0660	Florida Atlantic University Boca Raton, FL 33432		r	
0670	Florida International University Miami, FL 33144		r	m
0680	Florida Southern College Lakeland, FL 33802			
0690	Florida State University Tallahassee, FL 32306			
0700	Florida Technological University Orlando, FL 32816			
0710	Santa Fe Community College Gainesville, FL 32601			
0720	University of South Florida Tampa, FL 33620		r	

GEORGIA

0730	Clark College Atlanta, GA 30314		r	m
0740	DeKalb Community College Clarkston, GA 30021			
0750	Emory University School of Law Atlanta, GA 30322			
0760	Georgia Institute of Technology Atlanta, GA 30332		r	m
0770	Macon Junior College Macon, GA 31206			
0780	Medical College of Georgia Augusta, GA 30902	p	r	
0790	Oglethorpe College Atlanta, GA 30319			
0800	University of Georgia School of Law Athens, GA 30602			
0810	West Georgia College Carrollton, GA 30117			

HAWAII

0820	Hawaii Community College Hilo, HI 96720			
0830	University of Hawaii Honolulu, HI 96822	p		

IDAHO

0840	The College of Idaho Caldwell, ID 83605	p	r	m
0850	University of Idaho Moscow, ID 83843	p		

ILLINOIS

0860	Central YMCA Community College Chicago, IL 60606			
0870	De Paul University Chicago, IL 60614	p		m
0880	Elmhurst College Elmhurst, IL 60126			
0890	Illinois Benedictine College Lisle, IL 60532			
0900	Illinois Institute of Technology Chicago, IL 60616	p	r	m
0910	Kendall College Evanston, IL 60204			
0920	Loyola University of Chicago Chicago, IL 60626			
0930	Northeastern Illinios University Chicago, IL 60625			
0940	Northern Illinois University DeKalb, IL 60115			
0950	Northwestern University Evanston, IL 60201	p	r	m
0960	Northwestern University Medical School Chicago, IL 60611			
0970	Principia College Elsah, IL 62028			

0980	Roosevelt University Chicago, IL 60605		r	
0990	Sangamon State University Springfield, IL 62708		r	
1000	Southern Illinois University, Edwardsville Edwardsville, IL 62025		r	
1010	Southern Illinois University Medical School Springfield, IL 62708	p		m
1020	University of Chicago Chicago, IL 60637	p	r	
1030	University of Illinois at Chicago Circle Chicago, IL 60690		r	m
1040	University of Illinois, Urbana-Champaign Urbana, IL 61801	p	r	
1050	University of Illinois College of Law Champaign, IL 61820		r	
1060	Wheaton College Wheaton, IL 60187			

INDIANA

1070	Indiana University Bloomington, IN 47401	p	r	m
1080	Indiana University School of Law Bloomington, IN 47401			
1090	Purdue University Fort Wayne, IN 46805			
1100	Purdue University West Lafayette, IN 47907	p	r	m
1110	Rose-Hulman Institute of Technology Terre Haute, IN 47803	p	r	
1120	St. Meinrad College St. Meinrad, IN 47577			
1130	Wabash College Crawfordsville, IN 47933			

IOWA

1140	Central College Pella, IA 50219			
1150	Des Moines Area Community College Ankeny, IA 50010			
1160	Drake University Des Moines, IA 50311			
1170	Grinnell College Grinnell, IA 50112			
1180	Iowa State University Ames, IA 50010	p	r	m
1190	Luther College Decorah, IA 52101			
1200	St. Ambrose College Davenport, IA 52803			
1210	The University of Iowa Iowa City, IA 52240			
1220	University of Iowa School of Medicine Iowa City, IA 52242			m

KANSAS

1230	Kansas State University Manhattan, KS 66506			
1240	Kansas Wesleyan Salina, KS 67401			
1250	Saint Mary College Leavenworth, KS 66048			
1260	University of Kansas Lawrence, KS 66045			

KENTUCKY

1270	Eastern Kentucky University Richmond, KY 40351			
1280	Morehead State University Morehead, KY 40351		r	
1290	St. Catharine College Springfield, KY 40061			

1300 Thomas More College
Fort Mitchell, KY 41017

1310 Western Kentucky University
Bowling Green, KY 42101

LOUISIANA

1320 Louisiana College
Pineville, LA 71360

1330 Louisiana State University r
Baton Rouge, LA 70803

1340 Tulane University p r m
New Orleans, LA 70118

1350 University of Southwestern Louisiana
Lafayette, LA 70501

MAINE

1360 Colby College r
Waterville, ME 04901

MARYLAND

1370 Goucher College
Towson, MD 21204

1380 Johns Hopkins University
Baltimore, MD 21218

1390 Loyola College m
Baltimore, MD 21210

1400 University of Maryland School of Law
Baltimore, MD 21201

1410 University of Maryland School of Medicine m
Baltimore, MD 21201

1420 University of Maryland p r m
College Park, MD 20742

MASSACHUSETTS

1430 Amherst College
Amherst, MA 01002

1440	Babson College Babson Park, MA 02157	p	r	m
1450	Boston University Boston, MA 02215	p		m
1460	Boston University School of Law Boston, MA 02215	p	r	m
1470	Bradford College Haverhill, MA 01830			
1480	Brandeis University Waltham, MA 02154			
1490	Bridgewater State College Bridgewater, MA 02324			
1500	Bristol Community College Fall River, MA 02720			
1510	Clark University Worcester, MA 01610	p	r	
1520	College of the Holy Cross Worcester, MA 01610			m
1530	Dean Junior College Franklin, MA 02038			
1540	Garland Junior College Boston, MA 02215			m
1550	Hampshire College Amherst, MA 01002	p	r	m
1560	Harvard University Cambridge, MA 02138	p	r	m
1570	Massachusetts Institute of Technology Cambridge, MA 02139	p	r	m
1580	Mount Holyoke College South Hadley, MA 01075	p		
1590	North Shore Community College Beverly, MA 01915			m
1600	Northern Essex Community College Haverhill, MA 01830			
1610	St. John's Seminary College Brighton, MA 02135		r	

1620	Smith College Northampton, MA 01060			
1630	Southeastern Massachusetts University North Dartmouth, MA 02747		r	
1640	Tufts University Medford, MA 02155	p		
1650	University of Massachusetts Amherst, MA 01002	p	r	
1660	Wellesley College Wellesley, MA 02181			
1670	Western New England College Springfield, MA 01119			
1680	Western New England College School of Law Springfield, MA 01119			
1690	Westfield State College Westfield, MA 01085			
1700	Williams College Williamstown, MA 01267		r	
1710	Worcester Polytechnic Institute Worcester, MA 01609			m
1720	Worcester State College Worcester, MA 01602			

MICHIGAN

1730	Albion College Albion, MI 49224			
1740	Delta College University Center, MI 48710			m
1750	Grand Rapids Junior College Grand Rapids, MI 49502			
1760	Henry Ford Community College Dearborn, MI 48128			
1770	Michigan State University East Lansing, MI 48824	p	r	m
1780	University of Detroit Detroit, MI 48221		r	m

1790	University of Michigan Ann Arbor, MI 48104	p	r	m
1800	University of Michigan Medical School Ann Arbor, MI 48104	p		
1810	Wayne State University Detroit, MI 48202		r	m
1820	Western Michigan University Kalamazoo, MI 49008			

MINNESOTA

1830	Carleton College Northfield, MN 55057	p	r	m
1840	University of Minnesota Minneapolis, MN 55455		r	m

MISSISSIPPI

1850	Mississippi State University Mississippi State, MS 39762			

MISSOURI

1860	Fontbonne College St. Louis, MO 63105			
1870	Meramel Community College Kirkwood, MO 63122			
1880	Northeast Missouri State University Kirksville, MO 63501			m
1890	St. Louis University St. Louis, MO 63103	p	r	m
1900	Tarkio College Tarkio, MO 64491			
1910	University of Missouri--Kansas City School of Medicine Kansas City, MO 64108			
1920	University of Missouri-Rolla Rolla, MO 65401	p	r	
1930	Washington University St. Louis, MO 63130	p	r	m

1940	Webster College Webster Grove, MO 63119		r	

MONTANA

1950	Carroll College Helena, MT 59601			
1960	Dawson College Glendine, MT 59330			
1970	Montana State University Bozeman, MT 59715			

NEBRASKA

1980	Creighton University Omaha, NE 68178	p	r	
1990	Kearney State College Kearney, NE 68847			
2000	University of Nebraska College of Medicine Omaha, NE 68105			

NEVADA

2010	University of Nevada, Reno Reno, NV 89507	p	r	

NEW HAMPSHIRE

2020	Keene State College Keene, NH 03231			
2030	Plymouth State College Plymouth, NH 03264			

NEW JERSEY

2040	New Jersey Institute of Technology Newark, NJ 07102	p		m
2050	Princeton University Princeton, NJ 08540	p	r	m
2060	Ramapo College of New Jersey Mahwah, NJ 07430	p		

2070	Rutgers College New Brunswick, NJ 08903			
2080	Stevens Institute of Technology Hoboken, NJ 07030	p	r	m
2090	Upsala College East Orange, NJ 07019		r	

NEW MEXICO

2100	New Mexico State University Las Cruces, NM 88003			
2110	University of New Mexico Albuquerque, NM 87131		r	m

NEW YORK

2120	Adelphi University Garden City, NY 11530			
2130	Alfred University Alfred, NY 14802		r	
2140	Borough of Manhattan Community College New York, NY 10019			
2150	Briarcliff College Briarcliff Manor, NY 10510			
2160	Bronx Community College of the City University of New York (CUNY) Bronx, NY 10453			
2170	City College of the CUNY New York, NY 10031	p	r	
2180	Colgate University Hamilton, NY 13346			
2190	College of Mount Saint Vincent Riverdale, NY 10471			
2200	Columbia University New York, NY 10027		r	
2210	Columbia University School of Public Health New York, NY 10027		r	
2220	Cornell University Ithaca, NY 14853	p	r	m

2230	Corning Community College Corning, NY 14830		r	m
2240	Dutchess Community College Poughkeepsie, NY 12601			m
2250	Fordham University Bronx, NY 10458		r	
2260	Fulton-Montgomery Community College Johnstown, NY 12095			
2270	Hamilton College Clinton, NY 13323		r	m
2280	Hartwick College Oneonta, NY 13820			
2290	Hofstra University Hempstead, NY 11550			
2300	Iona College New Rochelle, NY 10801		r	
2310	Ithaca College Ithaca, NY 14850			m
2320	Jamestown Community College Jamestown, NY 14701			
2330	John Jay College of the CUNY New York, NY 10019			
2340	Herbert H. Lehman College Bronx, NY 10468			
2350	Le Moyne College Syracuse, NY 13214		r	
2360	Manhattan College Bronx, NY 10471		r	
2370	New York Medical College Valhalla, NY 10595			
2380	Nyack College Nyack, NY 10960			
2390	Pace University New York, NY 10038			
2400	Rensselaer Polytechnic Institute Troy, NY 12181	p	r	m

2410	Rochester Institute of Technology Rochester, NY 14623			
2420	Russell Sage College Troy, NY 12180			
2430	St. John Fisher College Rochester, NY 14618			
2440	St. Lawrence University Canton, NY 13617			
2450	Southampton College of Long Island University Southampton, NY 11968		r	
2460	State University of New York at Albany Albany, NY 12222		r	
2470	State University of New York at Binghamton Binghamton, NY 13901	p	r	m
2480	State University of New York at Buffalo Buffalo, NY 14214		r	
2490	State University of New York at Stony Brook Stony Brook, NY 11794	p	r	m
2500	State University of New York College at Cortland Cortland, NY 13045		r	
2510	State University of New York College of Environmental Science and Forestry Syracuse, NY 13210	p	r	m
2520	State University of New York College at New Paltz New Paltz, NY 12561			
2530	State University of New York College at Oneonta Oneonta, NY 13820			
2540	State University of New York College at Plattsburgh Plattsburgh, NY 12901		r	
2550	State University of New York College at Potsdam Potsdam, NY 13676			
2560	State University of New York--Empire State College Saratoga Springs, NY 12866			
2570	Staten Island Community College of CUNY Staten Island, NY 10301			
2580	Syracuse University Syracuse, NY 13210	p	r	m

2590 Union College
Schenectady, NY 12308

2600 University of Rochester
Rochester, NY 14627

2610 University of Rochester School of Medicine and Dentistry
Rochester, NY 14620

2620 Vassar College p r
Poughkeepsie, NY 12601

2630 Wells College
Aurora, NY 13026

2640 Westchester Community College
Valhalla, NY 10595

NORTH CAROLINA

2650 Belmont Abbey College m
Belmont, NC 28012

2660 Davidson College
Davidson, NC 28036

2670 Duke University p r
Durham, NC 27707

2680 Lenoir Rhyne College
Hickory, NC 28601

2690 North Carolina State University r
Raleigh, NC 27607

2700 University of North Carolina at Asheville
Asheville, NC 28804

2710 University of North Carolina at Chapel Hill m
Chapel Hill, NC 27514

2720 Western Carolina University
Cullowhee, NC 28723

NORTH DAKOTA

2730 Minot State College
Minot, ND 58701

2740 North Dakota State University r
Fargo, ND 58102

OHIO

2750	Baldwin-Wallace College Berea, OH 44017			
2760	Case Western Reserve University Cleveland, OH 44106	p	r	
2770	Case Western Reserve University School of Law Cleveland, OH 44106			
2780	Cleveland State University Cleveland, OH 44115			
2790	Lorain County Community College Elyria, OH 44035			
2800	Marietta College Marietta, OH 45750			
2810	Ohio State University Columbus, OH 43210		r	
2820	Ohio University Athens, OH 45701		r	
2830	University of Dayton Dayton, OH 45469		r	
2840	Ursuline College Cleveland, OH 44124			m
2850	Wright State University Dayton, OH 45431			
2860	Youngstown State University Youngstown, OH 44555			

OKLAHOMA

2870	Langston University Langston, OK 73050			
2880	Oklahoma State University Stillwater, OK 74074		r	
2890	Oral Roberts University Tulsa, OK 74102			
2900	University of Oklahoma Norman, OK 73069	p	r	m
2910	University of Tulsa Tulsa, OK 74104			

OREGON

2920	Oregon Institute of Technology Klamath Falls, OR 97601			
2930	Oregon State University Corvallis, OR 97331		r	
2940	Portland State University Portland, OR 97207	p	r	m
2950	Reed College Portland, OR 97202			
2960	Southern Oregon College Ashland, OR 97520			
2970	University of Oregon School of Law Eugene, OR 97403			
2980	University of Portland Portland, OR 97203		r	
2990	Willamette University Salem, OR 97301			

PENNSYLVANIA

3000	Albright College Reading, PA 19604			
3010	Allentown College of St. Francis de Sales Center Valley, PA 18034			
3020	Bucknell University Lewisburg, PA 17837	p	r	
3030	Carnegie-Mellon University Pittsburgh, PA 15213	p	r	
3040	Clarion State College Clarion, PA 16214			
3050	Dickinson College Carlisle, PA 17013			
3060	Drexel University Philadelphia, PA 19104		r	
3070	Duquesne University Pittsburgh, PA 15219			

3080	Duquesne University School of Law Pittsburgh, PA 15219	p	r	m
3090	East Stroudsburg State College East Stroudsburg, PA 18301		r	
3100	Franklin and Marshall College Lancaster, PA 17604			
3110	Geneva College Beaver Falls, PA 15010			
3120	King's College Wilkes-Barre, PA 18711		r	
3130	Kutztown State College Kutztown, PA 19530			
3140	Lafayette College Easton, PA 18042		r	m
3150	Lehigh University Bethlehem, PA 18015	p	r	m
3160	Lock Haven State College Lock Haven, PA 17745			
3170	Mercyhurst College Erie, PA 16501			
3180	Northampton County Area Community College Bethlehem, PA 18017			
3190	Pennsylvania State University--Allentown Campus Fogelsville, PA 18051		r	
3200	Pennsylvania State University University Park, PA 16802	p	r	m
3210	Milton S. Hershey Medical Center of the Pennsylvania State University Hershey, PA 17033			m
3220	Seton Hill College Greensburg, PA 15601			
3230	Temple University Philadelphia, PA 19122		r	
3240	Thiel College Greenville, PA 16125			
3250	University of Pennsylvania Philadelphia, PA 19174	p	r	

3260 University of Pittsburgh r m
Pittsburgh, PA 15260

3270 University of Pittsburgh Graduate School of Public Health
Pittsburgh, PA 15261

3280 University of Scranton
Scranton, PA 18510

3290 Westminster College
New Wilmington, PA 16142

3300 Widener College
Chester, PA 19013

RHODE ISLAND

3310 Brown University p r m
Providence, RI 02912

3320 Rhode Island College
Providence, RI 02908

SOUTH CAROLINA

3330 Converse College r m
Spartanburg, SC 29301

3340 Newberry College
Newberry, SC 29108

3350 University of South Carolina r m
Columbia, SC 29208

3360 Vorhees College m
Denmark, SC 29042

3370 Winthrop College
Rock Hill, SC 29730

SOUTH DAKOTA

3380 University of South Dakota at Springfield
Springfield, SD 57062

TENNESSEE

3390 Bryan College
Dayton, TN 37321

3400 Carson-Newman College
Jefferson City, TN 37760

3410 Cumberland College
Lebanon, TN 37087

3420 Maryville College
Maryville, TN 37801 p r m

3430 Vanderbilt University
Nashville, TN 37235 r m

3440 Vanderbilt University School of Law
Nashville, TN 37240

TEXAS

3450 Abilene Christian College
Abilene, TX 79601

3460 East Texas Baptist College
Marshall, TX 75670

3470 Incarnate Word College
San Antonio, TX 78209

3480 Midwestern University
Wichita Falls, TX 76308

3490 North Texas State University
Denton, TX 76203 r m

3500 Sam Houston State University
Huntsville, TX 77340

3510 Southern Methodist University
Dallas, TX 75275 r

3520 Southern Methodist University School of Law
Dallas, TX 75275

3530 Southwest Texas State University
San Marcos, TX 78666

3540 Texas A&M University
College Station, TX 77843 r m

3550 Texas Tech University
Lubbock, TX 79409 r

3560 University of Houston at Clear Lake City
Houston, TX 77059 p

3570	University of Houston Houston, TX 77004			
3580	University of Texas at El Paso El Paso, TX 79968			
3590	University of Texas Health Sciences Center at Houston Houston, TX 77025			
3600	Wharton County Junior College Wharton, TX 77488			
	UTAH			
3610	University of Utah Salt Lake City, UT 84112			
	VERMONT			
3620	Goddard College Plainfield, VT 05667	p		m
3630	Green Mountain College Poultney, VT 05764			
3640	Johnson State College Johnson, VT 05656			
	VIRGINIA			
3650	Blue Ridge Community College Weyers Cave, VA 24486			
3660	Christopher Newport College Newport News, VA 23606	p	r	m
3670	Marshall-Whyte School of Law College of William and Mary Williamsburg, VA 23185			
3680	Ferrum College Ferrum, VA 24088			
3690	University of Virginia, Charlottesville Charlottesville, VA 22901		r	
3700	University of Virginia School of Medicine Charlottesville, VA 22901	p		

3710 University of Virginia, Virginia Institute of Marine Science — r
Gloucester Point, VA 23062

3720 Viginia Military Institute — r
Lexington, VA 24450

3730 Virginia Polytechnic Institute and State University — r
Blacksburg, VA 24061

2740 Washington and Lee University — p
Lexington, VA 24450

WASHINGTON

3750 University of Washington — p r m
Seattle, WA 98195

3760 Whitworth College
Spokane, WA 99251

WEST VIRGINIA

3770 Alderson-Broaddus College
Philippi, WV 26416

3780 Davis and Elkins College
Elkins, WV 26241

3790 Southern West Virginia Community College
Williamson, WV 25661

3800 West Virginia University — r
Morgantown, WV 26506

3810 West Virginia University Law Center — r
Morgantown, WV 26506

WISCONSIN

3820 Alverno College — m
Milwaukee, WI 53215

3830 Lakeland College — m
Sheboygan, WI 53081

3840 Mount Mary College
Milwaukee, WI 53222

3850 Northland College
Ashland, WI 54806

3860	Ripon College Ripon, WI 54971		r	
3870	University of Wisconsin-Green Bay Green Bay, WI 54302			
3880	University of Wisconsin-La Crosse La Crosse, WI 54601			
3890	University of Wisconsin-Madison Madison, WI 53706	p		
3900	University of Wisconsin-Madison Center for Health Sciences Madison, WI 53706	p		
3910	University of Wisconsin Law School Madison, WI 53706			
3920	University of Wisconsin-Milwaukee Milwaukee, WI 53201	p		m
3930	Medical College of Wisconsin Milwaukee, WI 53233		r	m
3940	University of Wisconsin-Stevens Point Stevens Point, WI 54481			
3950	University of Wisconsin-Stout Menomenie, WI 54751		r	m
3960	University of Wisconsin-Whitewater Whitewater, WI 53190			
3970	Viterbo College La Crosse, WI 54601			

PUERTO RICO

3980	University of Puerto Rico School of Law Rio Piedras, PR 00931		r	

A. COURSES, COLLOQUIA/LECTURE SERIES, FUTURE PLANS

ABBREVIATIONS USED IN COURSE LISTING

AS = *American Scientist*
av = audiovisuals
b = books
D = *Daedalus*
ECCP = Engineering Concepts Curriculum Projects
f = films
F = faculty
G = graduate students
GS = General Studies
HC = Hastings Center
HCB = Hastings Center Bibliographies
HCR = Hastings Center Reports
ID = Interdepartmental
intnl = international
ja = journal articles
L = law students
M = medical students
n = newspaper articles; newspapers
NAE = National Academy of Engineering
n.s. = not specified
ntl = national
OU = Open University
p = paperbacks
r = reprints
R&D = research and development
S = *Science*
SA = *Scientific American*
sci = science
tech = technology
U = undergraduate students
Ucl = upperclass students

FORMAT FOR COURSE LISTING

course
code #
(c__)

Course #: *Course Title*.
Brief course description.

Reading materials used (by author's last name).
Faculty teaching course (Fac: __)
Cosponsoring department(s)/program(s)
# of times offered (__x); average # of students (__s); nature of student audience (U, G, Ucl, etc.)

ALABAMA

0010 AUBURN UNIVERSITY
Auburn, AL 36830

c01	Hist 204-205-206: Technology & Civilization. 3-term sequence on interaction between tech. & other aspects of human culture from prehistoric times to present.	p Fac: WD Lewis 425s
c02	Hist 380: Technology, Society & the Environment. Science fiction used as approach to study of relationships between sci., tech., & society, with intellectual history approach.	p Fac: WD Lewis U
c03	Hist 478-479: Technology & Society in the Pre-Industrial & Industrial Eras. Selected aspects of relationship between tech. & society.	p Fac: WD Lewis Ucl

Colloquia/Lecture Series

1. The Franklin Lectures: yearly series devoted especially to topics which link sci. & tech. with society. For students, faculty, local community. Arranger: TD Littleton, VP for Academic Affairs.
2. Keily Mosley Environmental Forum: for students, faculty, local community. Arranger: K Hays, Entomology-Zoology.
3. Science Fiction & Fantasy Society: bimonthly presentations of topics of scientific & technological interest, often stressing social/cultural dimensions. Arranger: WD Lewis, History.

0020 UNIVERSITY OF ALABAMA
University, AL 35486

c01	GES (ChemEng) 135: Engineering: A Cornerstone of Our Society.	r; FL Allen; DeCamp; Terborgh. Fac: JH Black
c02	Law 702: Environmental Law.	
c03	PolSci 418: Science, Technology, & Management. Basic processes of change shaping post-industrial society; administration, policy making, & political thinking derived from impact of tech. in 20th C.	

ARIZONA

0030 ARIZONA STATE UNIVERSITY
Tempe, AZ 85281

Abbreviations: ASE & MEE courses within School of Engineering
ITE courses within Division of Technology

c01	ASE 307: Environmental Systems Methodology. Methods for planning environmental programs.	DeGreene Fac: PF Ruff, RL Smith Geog 1x; 12s; U
c02	ASE 402: Technology, Society & Human Values. Values motivating development of tech. & conflicts between values & technological society.	ja & b; Lauda & Ryan; Burke; Teich. Fac: HW Welch Hum 8x; 60s; U, G
c03	ASE 403: Engineering Technology & Public Policy. Tech. assessment, environmental protection, resource management, social consequences of tech. related to policy formation.	ja; Dorf. Fac: HW Welch 3x; 10s; U, G
c04	ITE 346: Modern Technology & Civilization.	Lauda & Ryan Fac: T Watkins 9x; 25s; U, G
c05	MEE 201: Technology & Social Change.	FR Allen (1957) Fac: AJ Stafford 13x; 20s; U
c06	MEE 300: Man & Machine. Mechanical invention & technical progress; evolution of social forms & institutions.	Klemm; Forbes. Fac: AJ Stafford 13x; 100s; U
c07	MEE 301-302: Science & Technology in History.	CJ Singer Fac: AJ Stafford 16x; 100s; U
c08	MEE 401: Theory, Prediction & Social Effects of Invention. Invention as instrument of change in civilization.	Fac: AJ Stafford 16x; 20s; U, G
c09	PolSci 491: Politics of Science & Technology.	b & ja Fac: WT Keating 20-40s; U
c10	PolSci 494: Politics of Ecology.	b & ja Fac: WT Keating 50-80s; U

0040 UNIVERSITY OF ARIZONA COLLEGE OF LAW
Tucson, AZ 85721

c01 Law 313: Law & Medicine.
Forensic medicine & medical jurisprudence. Physician as expert witness; legal responsibilities of physician to patients; malpractice suits; drug liability litigation.
Curran & Shapiro
Fac: JJ Rappeport
15x; 50s; L

c02 Law 396T: Law & Technology.
Comparison of scientific & legal methods; study of applicability of tech. to law & legal implications of applications of tech. in our society.
b & ja
Fac: RJ Davis
3x; 10s; L

c03 Law 396TT: Law & Biomedical Technology.
Legal & related problems generated by present & projected advances in biological techs.
b & ja
Fac: R Spece
1x; 15s; L

ARKANSAS

0050 ARKANSAS COLLEGE
Batesville, AR 72501

c01 Western Tradition 301: Man & His Environment.
Man's relation to physical world & society.
Fac: D Wright
HealthSci

CALIFORNIA

0060 AMERICAN RIVER COLLEGE
Sacramento, CA 95841

c01 ID Stud 10: Man & Environment.
Aspects of environment either toxic or enhancing to man.
Greenwood & Edwards; Medvin.
Fac: R Christopherson

0070 CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, CA 91125

c01 Hist 157: Science in America.
Development of scientific community & its relation with American society.
b
Fac: DJ Kevles

8

c02 SocSci: Social Science Aspects of Technology. Social sci. theory of markets & prices & overlap with problems of engineering & tech. — Fac: staff

c03 SocSci/Eng: Research Seminar in Social Science Aspects of Technology. — Fac: staff

c04 Law, Legal Process, & the Control of Technological & Economic Risk. — b & ja; Fac: ME Levine

c05 Seminar on National Security. Tech. & ntl security. — Fac: D Elliot

0080 CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, CA 93407

c01 Eng 301: Technology in the 20th Century. Role of sci., engineering, & tech. in 20th C. Effects of technological change, function of scientist-engineer in society. — U

c02 PhysSci 171: Science & Society for Non-Scientists. Interdisciplinary approach to contemporary sci. — Fac: 3, 3-week periods, each taught by professor from different discipline

c03 PhysSci 471: Science & Society. Interdisciplinary approach to contemporary sci. — Fac: 5, 2-week periods, each taught by professor from different discipline; U

0090 CALIFORNIA STATE COLLEGE, DOMINGUEZ HILLS
Dominguez Hills, CA 90747

p01 Foundations of Natural Science (FNS)

c01 FNS 290: Seminar in the Foundations of Natural Science. — Fac: D Dobyns

c02 Chem 286: American Science & Technology. — Fac: D Dobyns

c03 Geog 224: Population & the Environment. Impact of technological change on deteriorating American environment. — U

c04 Hist 280: Science, Technology & Society Since 1500. — U

c05 Phil 217: Values & the Future. U
Moral problems as result of technological changes in last decades of 20th C.

c06 Phil 279: Contemporary Moral Issues. U
War, euthanasia, abortion, victimless crimes, sexual promiscuity.

c07 Phys 206: Modern Physics: Its Impact on 20th Century Thought. Fac: M Daugherty

c08 PolSci 275: Humanism, Technology, & Politics. U
Relates principles of humanism to contemporary social & political issues, including problems of modern sci. & tech., ecology, & human relations.

c09 PubAd 262: Environmental Protection Administration. U

c10 PubAd 265: Administration of Environmental Standards. U
Research methods & development problems in setting environmental goals & standards.

Future Plans: some expansion of course offerings in the field.

0100 CALIFORNIA STATE COLLEGE, STANISLAUS
Turlock, CA 95380

p01 Degree Minor in Technology & Change

c01 MDIS 2070: The Technological Society. p & av
New views of life, earth, cosmos as result of scientific knowledge; possible effects on future of cybernetics, systems analysis, biological revolution, etc.

c02 MDIS 4070: Seminar in Technology & Society. p & av

c03 Math 1200: Computers & Society.

c04 PhysSci 2100: Physical Science in the Modern World.

0110 CALIFORNIA STATE UNIVERSITY, LOS ANGELES
Los Angeles, CA 90032

c01	Eng 250: Impact of Technology on Society.	Edel; Meadows, et al.; SA. Fac: J Levine, R Roberto 120s
c02	Eng 352: Technological Aspects of Urban Environment. Current engineering practice in dealing with urban problems.	b & ja Fac: F Balle 40s
c03	Geog 485: Marine Geography. Off-shore political, economic, & social problems of coastal states.	b & ja Fac: H Coffin 40s

0120 THE CLAREMONT COLLEGES
Claremont, CA 91711

Program in Public Policy Studies (PPPS)

c01	PPPS: Public Policy Studies. Research on topics such as health care delivery, alternative energy, ecology.	
c02	JointSci: Science & Government. Politics of sci. policy questions.	ja Fac: J Merritt, D Sadara

0130 CLAREMONT GRADUATE SCHOOL
Claremont, CA 91711

c01	Hist: Technology in Civilization. Revolution in sci., modern tech., growth of world-wide industrial civilization. Social, economic, & cultural effects of scientific advance & technological innovation.	Fac: J Rae U, G
c02	IR: Man's Domination of Nature: the Intellectual Background. Theme of subjugation of the earth; popular culture; industrial society's war on nature as means of progress; rationale of economic backlash.	Fac: P Shepard G
c03	IR: International Aspects of the Environment: Oceans, Resources, & Populations. Intnl political aspects of resource exploitation & pollution.	Fac: J Sullivan G

c04 Psych: Psychology of Science.
Sci. as an evolved social psychological system for development of "public" knowledge.
ja; Kuhn; Hanson.
Fac: MW Lipsey
Jx; G

c05 Psych: Values, Technology, & Society.
Relation of tech. to change in human values & social behavior.
b & ja
Fac: MW Lipsey

c06 Psych: Sociology of Psychology.
Psychology from stance of sociology of sci.
Ziman; b & ja.
Fac: AH Brayfield
U, G

c07 Psych: Science, Technology, & Emotions.
Experiential & behavioral impact of electromechanical tech.
Schwitzgebel & Schwitzgebel
Fac: RL Schwitzgebel

0140 HARVEY MUDD COLLEGE OF THE CLAREMONT COLLEGES
Claremont, CA 91711

c01 Hist 151: Technology in Civilization III.
Revolution in sci. & emergence of modern industrialism; social, economic, & cultural effects of scientific advance & technological innovation.
Cardwell (1972); Kranzberg & Pursell (vol. 1).
Fac: J Rae

c02 Hist 152: Technology in Civilization IV.
Growth of world-wide industrial civilization; sci. & tech. in civilization of last 100 yrs.; diffusion of western tech. to other cultures.
Kranzberg & Pursell (vol. 2)
Fac: J Rae

c03 Hum 131: Technology, Literature, & Art.
Interplay between tech. & society as revealed in modern & contemporary poetry, fiction, drama, & art.
Mumford (1952); L Marx; Ginestier; Davenport.
Fac: WH Davenport
15s

0150 DOMINICAN COLLEGE OF SAN RAFAEL
San Rafael, CA 94901

c01 Bio 7/107: Man & His Environment: Crises & Conflicts.
Attempt to reevaluate society's goals & aims based on knowledge of natural order & balance.
b & ja; n
Fac: SL Volk
25s; U

c02 Bio 180: Social Implications of Modern Biology.
ja
Fac: SL Volk
30s; U

0160 IMMACULATE HEART COLLEGE
Los Angeles, CA 90027

c01 Bio 196: Seminar in Science & Society.
Historical development of sci. & its effect on society.
Truitt & Solomons; b & ja; n; HC.
Fac: DM Juge & fac. from Soc., Phil., Rel., ForLangs.
3x

Future Plans: a major in Social Impact Biology.

0170 LA VERNE COLLEGE
La Verne, CA 91750

c01 EnvStud: Ekistics.
Ways of using multidisciplinary approach of Ekistics for conservation & environmental education.
Fac: RT Neher

0180 LOYOLA MARYMOUNT UNIVERSITY
Los Angeles, CA 90045

c01 PO 448: Public Policy--The Environment. Fac: Blakesley

c02 SO 344: Social Ecology. Fac: Mathieu

c03 ST 205: Computers & Society. Fac: Rude

c04 ST 209: Technology & the Environment. Fac: Anderson

Colloquia/Lecture Series

1. Rosecrans-Sigma Xi Club Science Seminars: for faculty & students.
Arrangers: JP Callinan & J Schwartz.

Future Plans: seminars and colloquia.

0190 LOYOLA UNIVERSITY SCHOOL OF LAW
Los Angeles, CA 90015

c01 Law 354: Genetic Engineering & the Law.
Lawyers, geneticists, & population planners analyze various questions related to genetic engineering.
ja
Fac: RG Decker

0200 MENLO COLLEGE
Menlo Park, CA 94025

Abbreviations: I = Interim

c01	I '74-75: Science in the Bay Area. Interaction of sci. & society in Bay Area.	b & ja Fac: LB Seely, Jr. 2x; U
c02	I '75: Computers & Society. Introduction to computer as technological innovation; its uses & effects within society.	b & ja Fac: GW Rollosson 1x; U
c03	I '76-77: Technology & Society.	Fac: GW Rollosson

Future Plans: continuing to attempt to generate student response to Interim Session courses.

0210 MERCED COLLEGE
Merced, CA 95340

c01	Anthro: The Future of Man & America.	Bronowski (1974) Fac: C Ostrander
c02	Anthro: Man, Cultures & Society. Cultural, biological, & physical forces that have influenced historic & current development of man.	Bronowski (1974) Fac: C Ostrander

Colloquia/Lecture Series

1. Ascent of Man: for community college students & the community.
   Arranger: C Ostrander.
2. Future of Man
3. Man, Culture & Society

0220 OCCIDENTAL COLLEGE
Los Angeles, CA 90041

c01	GS P31-32: Perspectives in Literature & Science.	Sarton; CJ Singer; Aeschylus; Sophocles; Euripedes; Aristophanes; Plato (2); Aristotle; Dante. Fac: B Busacca-Engl/CompLit S VandenBerg-Engl/CompLit S Elliott-Phys J McAnally-Chem P Wells-Bio 1x; 107s

c02 GS P41-42: Perspectives in Marine Studies.
Dales; AM Freeman, et al.
Fac: J Stephens-Bio
J Humphrey-Eco
J McAnally-Chem
2x; 32s

c03 RelStud 55: Bioethics.
Fac: M Taylor
2x; 10s

0230 PALOMAR COLLEGE
San Marcos, CA 92069

c01 Bio 5: Man, Science & Environment.
Fac: D Bostic
Chem, EarthSci, LifeSci

c02 Chem 34: Environment & Technology.
Role of chemistry in major social problems of today. Chemical myths, chemistry for the future.

0240 RIO HONDO COLLEGE
Whittier, CA 90608

c01 Bio 30: Science & the Humanitarian Perspective.
Intellectual history of sci.--emergence of sci. as dominant product of mind of man in 20th C.
Bronowski (1974); ja.
Fac: BW Burkhart-Bio
H Platzer-Hum
2x; 75s

0250 SAN FRANCISCO STATE UNIVERSITY
San Francisco, CA 94132

p01 Center for Interdisciplinary & Innovative Science
p02 Science & Humanities: A Program for Convergence
"Earth 2020"
"The Next Billion Years"

c01 Eng 310: Man & Modern Technology.
Fac: Treadwell

c02 Engl 324: Einstein & Modern Literature.
Emphasis on theory of relativity & how it affects modern literature.
b & ja; f.
Fac: AJ Friedman, UC Lawrence Hall of Science
Guest lecturers:
S Locks-Art
A Hansen-Lit (U of Pacific)
3x; 25s

c03	Engl 630: Darwin & the History of Ideas. Evolution & history of ideas as reflected in literature.	b & ja; f. Fac: M Gregory-Engl M Ghiselin-UC Bodega, consultant Guest lecturers: R Bowman-Bio J Tomlinson-Bio 2x; 20s
c04	Engl/Phil 671: Newton: Physics, Philosophy & Literature. Influence of Newtonian sci. during 18th C. on English literature, British philosophy & religion, & conception of human nature.	b & ja; f. Fac: E Nierenberg-Engl R Kahl-Phil N Feifer-Phys 1x; 18s
c05	NatSci 674: Chance & Necessity: Evolution & Ethics. Humanistic philosophy of Jacques Monod; significance of biological evolution in ethics of present.	Fac: R Doell
c06	NatSci 676: Science & World Peace. Physical/biological scis. & the earth; why humans fight; generating desire for peace; perfecting tools & mechanisms of peace.	Fac: DQ Posin
c07	PhysSci 305: Physical Science & Human Values. Effect of sci. on tech., warfare, ecology, population, & the human mind.	Fac: DQ Posin
c08	PhysSci 387: Evolution of Scientific Thought. Roles of sci. & society in history of ideas centering around work of Copernicus, Kepler, Galileo, Newton, & Einstein.	Fac: F Creese
c09	PhysSci 690: Ancient Science. Roots of scientific thought. Influence of social, philosophical, economic forces in development of ancient sci. & tech. Relationship between ancient & modern sci.	Fac: N Feifer

Colloquia/Lecture Series

1. Science-Humanities Liaison Group Staff Seminar: for faculty members & students in School of Humanities & School of Natural Science. Arranger: MS Gregory.

0260 SAN JOSE STATE UNIVERSITY
San Jose, CA 95192

p01 Futures Studies Area
p02 Master's Degree Program in Cybernetic Systems (CS)

c01	CS 100: Cybernation & Man. Impact of cybernation on political, economic, social, & moral structure of mankind.	Parkman Fac: R Parkman-MatSci D Markham-Speech/Comm Invited speakers 20+x; 35s; U, G
c02	CS 200: The Technological Society. Tech. as cultural force; implications for man's future.	Parkman; Wiener; Pirage & Ehrlich. Fac: R Parkman-MatSci NO Gunderson-CS D Miller-LibStud 12+x; 30s; G
c03	CS 202: Evolution of Technical Innovation. Inquiry into creative process used by innovative people of past; principles & sequence of events leading up to discovery; impact of innovativeness on society.	G
c04	CS 204: Future Studies Survey. Modern futurist thought, methods, & applications.	D Miller Fac: D Miller-LibStud 8x; 25s; G
c05	CS 205: Advanced Futures Studies. Application of concepts & methods of futures studies to topics of class concern; case studies of futures projects of business, industry, & government.	D Miller Fac: P Schwartz-Eng 4x; 15s; G
c06	CS 206: Technology Assessment. Identification & assessment of social effects of tech. & sci. Tech. forecasting. Benefit-cost studies.	b Fac: L Weisbecker-Chem 5x; 15s; G
c07	CS 208: Technology Transfer. Impact on the social, cultural, & economic structures of developing nations when advanced tech. introduced.	ja; n. Fac: NO Gunderson 4x; 20s; G
c08	CS 216: Information Management. Social issues in computing. Overview of main features of modern information handling systems & likely trends in future systems.	Gotlieb & Borodin; ja; n. Fac: D Parker-Math 3x; 15s; G
c09	CS 218: Telecommunications as Social Systems. Interaction of technological, social, political, economic, & psychological aspects of communication systems; emphasis on significance of intnl network operations.	ja; material from intnl Telecommunications Union. Fac: G Wallenstein 4x; 15s; G

c10	CS 220: Applications of Systems Techniques. In-depth evaluation of case studies in analysis & synthesis of dynamic systems as used in social, environmental, & technological problem areas.	G
c11	CS 225: Advanced Systems Methods. Modeling & simulation of complex societal problems in which non-quantifiable social factors are equal to or of greater importance than quantifiable factors.	G
c12	CS 230: Applied Cybernetics. Multidisciplinary attack on selected complex societal problems.	Forrester; MR Goodman. Fac: individuals from diverse disciplines 30s; G
c13	CS 250: Educational Cybernetics. Application & impact of technological development on education system.	2x; G
c14	CS 260: Environmental Cybernetics. Cybernetic systems problem solving methodologies applied to environmental systems.	2x; G
c15	CS 270: Socio-Economic Cybernetics. Cybernetic systems problem solving methodologies applied to socioeconomic systems.	2x; G
c16	CS 280: Organizational Cybernetics. Cybernetic systems problem solving methodologies applied to manpower & management systems.	2x; G
c17	CS 297: Special Topics in Cybernetics. Special topics to augment regularly sheduled graduate courses.	G
c18	Eng 10: Technology & Social Change. Some basic socio-technological problems of next 2 decades. Historical origins & potential systematic approaches to their resolution.	Pursell; Piel & Truxal. Fac: R Parkman Invited speakers 3x; 10s; U
c19	Eng 196: Technology Impact Studies. Includes preparation of tech. assessments.	Teich; US Library of Congress. Fac: R Parkman 1x; 14s; U, G

Colloquia/Lecture Series

1. CS End-of-the-term Project Presentations & Thesis of Special Merit: for faculty, students, area professionals. Arranger: NO Gunderson.

Future Plans: closer liaison of CS with similar systems-type programs at Bay Area universities; possible development of undergraduate minor and/or major in Cybernetic Systems; closer cooperation between CS and other on-campus graduate programs (e.g., Urban Planning & Public Administration).

0270 STANFORD UNIVERSITY
Stanford, CA 94305

p01 Arms Control & Disarmament Program (ACD)
p02 Engineering-Economic Systems (EES)
p03 Program in Human Biology (HuB)
p04 Program in Information Technology & Telecommunications
p05 Program in Values, Technology, & Society (VTS)

c01	PolSci/Hist 138A: Arms Control & Disarmament. Emphasis on SALT.	b & ja Fac: J Lewis, L Weiler, J Barton, & interdisciplinary faculty ACD 5x
c02	PolSci/Hist 138B: Arms Control & Disarmament.	b & ja Fac: J Lewis, L Weiler, J Barton, & interdisciplinary faculty ACD 5x
c03	HuB 4B: Human Institutions. Economic & political principles relevant to contemporary problems of human biology.	Heilbroner (1972; 1974); Dahl; Lindblom; Friedmann. Fac: P Ehrlich-Bio 4x; 225s; U
c04	HuB 102: Health as Human Ecology. Interplay of environmental, genetic, & social factors. Value choices involving life & health.	McKeown & Lowe; NAS (1970); WHO. Fac: J Lederberg-Genetics 4x; 40-50s; U
c05	HuB 106: Man-Made Environment. Man's role in shaping environment.	Hall; McHarg. Fac: G Collier-CivEng 3x; 20-25s; U
c06	HuB 140: Energy & Society.	Steinhart & Steinhart; Ford Foundation (1974b). Fac: TJ Connolly-MechEng S Liebes-Genetics 4x; U
c07	HuB 150: Biosocial Aspects of Birth Control. Legal, political, cultural, economic, & biological factors.	b & ja Fac: C Djerassi-Chem 2x; 40s; U

c08	HuB 152: *Biosocial Aspects of Pest Control.*	b & ja Fac: D Kennedy-Bio 1x; 40s; U
c09	VTS 101: *Contemporary Technological Society.* VTS Introductory course.	Pelto; Boorstin; Tribe; ja. Fac: RE McGinn 3x; 50-60s
c10	VTS 105: *Human Values & Technological Society.* Interactions of values, tech., & society from humanistic perspective; attempt to elaborate normative evaluative frameworks for assessment of aspects of technological society.	n.s.: Marx, Nietzsche, Rilke, Seneca, Kafka, Thoreau, Zola; Hardin, Mishan, Bell, Rieff. Fac: RE McGinn 4x; 50-55s
c11	VTS 106: *Technology, Humanity, & Nature.* Nature of tech., its character in various cultural settings, technological change in 20th C.	McHale; Rochlin. Fac: SJ Kline 2x; 15s
c12	VTS 107: *Technology & Modern Industrial Society.* Economic significance of tech. during last 200 yrs.	n.s.: Kuznets, Landes, Rosenberg, et al.; ja. Fac: N Rosenberg 1x; 30s
c13	VTS 115: *Models & Modeling: Representations of Reality.* Illustrates pervasiveness of models in all realms of intellectual & everyday experience.	Meadows, et al.; Conant. Fac: DF Tuttle 3x; 20s
c14	VTS 121: *Technology & Society: Historical Perspectives.* Social history of tech.--ancient times to 19th C.	Morison; White (1962; 1971); Cipolla. Fac: WG Vincenti 3x; 30-35s
c15	VTS 125: *Case Study in Socio-Technological History.* In-depth examination of a case study in socio-technological history. 1974: City of Manchester in 19th C.	Engels (1958); Briggs; Harrison. Fac: WG Vincenti 1x; 6s
c16	VTS/Eng 141: *Energy: From Nature to Man.* Basic concepts/principles of energy sci. & tech.; social aspects of energy.	Reynolds Fac: WC Reynolds 4x; 75-100s
c17	VTS 142: *Information: The Communications Revolution in Contemporary Society.* Basic concepts/principles of communications & information theory & tech.; social aspects.	SA (9/72); J Martin; ja. Fac: WR Kincheloe 3x; 20s

c18	VTS/AppliedEarthSci 143: Materials: Non-Renewable Earth Resources & Man. Concepts/principles of materials sci. & tech.; social aspects.	Fac: E Just 1x; 30s
c19	VTS 153: Ownership, Property, & Environment. Concept of property, rights of ownership, & various environmental resources in US & cultures at different technological levels (Tiwi, Japan, China).	K Marx (1965); Galbraith (1967); Geertz; Reich (2); ja. Fac: RA Kreiss 3x; 18s
c20	VTS 154: Law, Morality, & Technology. Case studies: surveillance, abortion, urban growth, genetic engineering, etc.	Tribe; Levi; ja. Fac: PH Rhinelander 1x; 40s
c21	VTS 195: Special Topics in VTS: The Literature of Technology: Technology & Decadence. Themes of decadence in modern literature as related to modern tech.	n.s.: Vonnegut, Nin, Lawrence, Brecht, Rilke, Huysmans; Pirsig. Fac: RE McGinn, D Mellinkoff 1x; 20s
c22	EES/Comm 280: Telecommunications Systems & Public Policy. Study of public policy problems from perspective of telecommunications area.	J Martin; Sharpe; Abramson & Kuo. Fac: CE Agnew

Colloquia/Lecture Series

1. ACD Faculty Seminars (4/quarter) featuring visiting authorities in the field: for faculty & graduate students from Stanford & nearby universities & institutions. Arranger: ACD staff.
2. VTS Research Forum (3/quarter): for faculty. Arranger: Edwin Good.

0280 UNIVERSITY OF CALIFORNIA, BERKELEY
Berkeley, CA 94720

p01 Office for History of Science & Technology (OHST)
p02 Energy & Resources Program (E)

c01	E 298-1: Energy & Resources Seminar. Patterns of supply & demand; tech. of long- & short-term sources; environmental aspects; economic, policy, & intnl aspects.	Fac: J Holdren, Lichtenberg, Merriam guest lecturers
c02	Biochem 150: Biochemistry & Society. Biochemical perspective on technological intrusions threatening life; professional responsibility of biochemist to society.	Fac: JB Neilands

c03	Eng 160: Energy & Power. Sources, conversion, transmission, & requirements for energy in human society; emphasis on electric power. Ecological & social problems.	Fac: Lieberman, Branch, Grossman
c04	Geog 254: Natural Resources & Population. The limits to growth.	Meadows, et al. Fac: Luten
c05	Hist 103S: Topics in History of Science.	U
c06	Hist 130A-B-C: Survey Course in History of Science. Development of scientific thought & technique.	b U
c07	Hist 131: Topics in History of Physical Science.	b U, G
c08	Hist 132: Topics in History of Biological Sciences.	U
c09	Hist 280S: Introduction to History of Science.	G
c10	Hist 285S: Research Seminar in History of Science.	
c11	IDS 60: Energy & Society. Energy sources, uses, & impacts.	Fac: Holdren
c12	Phil 102: Applied Ethics. Contemporary moral problems & procedures for solving--often examples from sci., tech., & society.	r Fac: M Scriven
c13	Phil 139: Philosophy of Science. Nature of sci. & philosophy of sci. Present state of research & activity in various scis. in terms of society's needs.	Fac: M Scriven
c14	PolSci 188: Technology & Politics. Aspects of the conceptual & policy related issues in relating technological change to social & political experience.	ja Fac: TR LaPorte Bx

Colloquia/Lecture Series

1. History of Science Colloquia (OHST): for faculty, researchers, graduate students. Arranger: JL Heilbron.

2. Science Policy Seminar: for faculty. Arranger: R Bendix.

Future Plans: M.A., M.S., & Ph.D. from Energy & Resources Program.

0290 UNIVERSITY OF CALIFORNIA, DAVIS
Davis, CA 95616

c01	Admin 217: Planning & Technology Assessment.	Hetman; ja. Fac: R Dorf
c02	Biochem 225: Science, the Scientist, & Society.	Fac: Hedrick
c03	Ecol 290: Environmental Ethics.	Reschler; Heller; Stone; Blackstone; Ewing. Fac: PA Sabatier, P Richerson 1x; 7s; G
c04	Eng 10: Technology & Society.	Dorf (1974b) Fac: R Dorf
c05	Eng 15: Computers & Society.	Dorf (1974a) Fac: R Dorf
c06	Eng 160: Energy & the Environment.	Fac: J Baughn
c07	EnvStud 102: Environmental Decision-making.	Fac: SI Schwartz, G Wandesforde-Smith
c08	EnvStud 112: Environmental Law.	Fac: taught by 2 practicing lawyers in the field
c09	EnvStud 165: Science, Experts, & Public Policy.	Schooler; Barber; Snow (1961); Ebbin & Kasper; S; ja. Fac: PA Sabatier, T Cahill 1x; 20-30s; U, G
c10	EnvStud 169: Environmental Movements & Public Policy.	Fac: PA Sabatier
c11	Geol 16: The Physical Earth & Man. Problem of non-renewable natural resources & role in tech. & society. Probable impact on society of their exhaustion.	
c12	Hist 185A-B: History of Science & Technology in America.	Fac: MB Sherwood, DC Swain U
c13	Hist 276: Social History of Science & Technology in America.	Fac: MB Sherwood
c14	PolSci 107: Environmental Politics.	Fac: G Wandesforde-Smith
c15	PolSci 207: Seminar in Environmental Politics.	Fac: G Wandesforde-Smith, PA Sabatier G

Future Plans: the Division of Environmental Studies is in the process of establishing an undergraduate major in environmental planning & policy analysis.

0300 UNIVERSITY OF CALIFORNIA, IRVINE
Irvine, CA 92664

c01 Bio 81: Biology & Public Policy.

c02 Cult&CognAnthro 131D: Comparative Studies of Technology & Resources.
Study of techniques useful in various cultures for survival & self-sufficiency.

c03 Eng 160: Energy: Resources, Production & Policy.

c04 Eng 168A: Socio-Political, Economic & Legalistic Aspects of Environmental Quality.

c05 Info&CompSci 258: Seminar in the Social & Economic Implications of Computers & Automation.

c06 Phys 19: Scientists & Social Responsibility.

c07 SocEcol 70: The Limits to Growth.

c08 SocEcol 84: Science & Public Policy.

c09 SocEcol 85/SocSci 801: Science & Ethics.
Population control, organ transplantation, genetic engineering, biological & chemical warfare, nuclear testing, etc.

c10 SocEcol 100: Ethics of Behavior Modification.

c11 SocEcol 150: Environmental Quality & Government Action.
Emphasis on social impact of government actions & role of community in bringing about new changes.

c12 SocEcol 162: Environmental Law.

c13 SocEcol 168: Economics of Ecology.
"Maximum wealth" goal to economic policy & implications for environment & population growth.

c14 SocEcol 251: Contemporary Environmental Issues.

c15 SocEcol 252: Man & His Environment.
Environmental determinants of behavior at individual & interpersonal level.

0310 CALIFORNIA COLLEGE OF MEDICINE--UNIVERSITY OF CALIFORNIA, IRVINE
Irvine, CA 92664

c01 Seminar: Psychiatry Clerkship.
Discuss medical ethics & values.

0320 UNIVERSITY OF CALIFORNIA, LOS ANGELES
Los Angeles, CA 90024

Abbreviations: ESE = Environmental Science & Engineering Program

c01 ESE 400A-B-C-D: Environmental Science & Engineering Problems Course. — Fac: staff
Technical & socioeconomic analysis & prognosis of significant current environmental problems.

Future Plans: work in the following areas: (1) impact, trends, & sensitivity of development of Outer Continental Shelf oil production from the Southern California Borderland; (2) problems of urbanization accompanying development of service coal exploitation in Southern Utah; (3) retaining urban mobility while meeting clean air/energy requirements.

0330 UNIVERSITY OF CALIFORNIA, LOS ANGELES, SCHOOL OF LAW
Los Angeles, CA 90024

c01 Law 357: Seminar on Law, Medicine, & Human Values. — Behnke & Bok
Fac: WJ Winslade
Ix; L, M, G
Legal, philosophical, & psychological issues arising in context of doctor-patient relationship. Value conflicts underlying & manifested in medical practices & legal policies.

c02 Law: Western Water Law. — Meyers & Tarlock (2)
Fac: S Williams

c03 Law: Environmental Law & Policy. — Krier; Baxter.
Fac: J Krier

c04 Law: Health Law. — ASUCLA
Fac: L Agran

Future Plans: a program along the themes of law, medicine, & human values is in the planning stage.

0340 UNIVERSITY OF CALIFORNIA, LOS ANGELES, SCHOOL OF MEDICINE
Los Angeles, CA 90024

p01 Medicine & Society Forum (MSF)

c01 Psychiatry 101: Introduction to Human Behavior.
Various aspects of society (e.g., law, drug abuse, racism) as they affect behavior.
b & ja; av.
Fac: L Jarvik
Invited speakers
1x; 144s; M

c02 SocMed 101.
Relationships between health systems & society.
b & ja; av.
Fac: S Greenfield
Invited faculty from Med & PubHealth
3x; 144s; M

Colloquia/Lecture Series

1. Medicine & Society Forum: monthly 1 hr. panel discussions on ethical, legal, educational, etc. aspects of the practice of the health scis. For multidisciplinary faculty, students, staff, general public. Arranger: B Towers-MSF.

Future Plans: developing proposal for Forum for the Study of Human Values in Medicine. This will incorporate MSF, include faculty with joint appointments in Health Science, Philosophy, Law, etc., & provide facilities for research fellows.

0350 UNIVERSITY OF CALIFORNIA, RIVERSIDE
Riverside, CA 92502

c01 Anthro 132: Cultural Ecology.
Effects of environment on society; impact of human management on ecosystem.
Fac: EN Anderson, AR Beals

c02 Econ 142: Natural Resource Economics.
Role of public policy in determining resource management & conservation.
Fac: TD Crocker, RC d'Arge

c03 EnvSci 3: Introduction to Natural Resource Economics & Policy.
Role of tech., institutional & administrative arrangements relating to the environment.
Fac: TD Crocker

c04 EnvSci 170: Gaming Simulation of Metropolitan Environment.
Role-playing & decision making; population, land use, air quality, political jurisdictions, etc.
Fac: J Letey, Jr.-SoilSci

c05 PolSci 178: Politics of the Environment.
Political process & policy problems in air, water, & land pollution.
Fac: RO Loveridge

0360 UNIVERSITY OF CALIFORNIA, SAN DIEGO
La Jolla, CA 92037

p01 The Energy Center
p02 Program In Science, Technology & Public Affairs (STPA)

c01 STPA: Origins & Results of the World's Space Program.
Political, technological, & strategic origins of US, Soviet, & other space programs.

c02 STPA: Arms & Arms Control.
Explores & analyzes current issue in tech. policy & how society copes with it.

c03 STPA: Seminar on Arms & Arms Control.

c04 STPA: Global Ecology.
Tech. & the intnl system. Development gap, green revolution, resource utilization, tech. transfer, intnl cooperation.

c05 STPA: Technology & Society.
Problems of coordination in advanced industrial societies, information flow, social cybernetics, sci. & models of social reality, & problems of social change.

c06 STPA: Technology & Human Values.
Influence of rise of sci. & tech. on political ideals, human life, freedom, education, & warfare.

c07 STPA/AMES 34: Energy: Demands, Resources, Technology & Policy. U
Survey course. Manner in which energy demands defined at local, regional, ntl, & intnl levels; total resources available; highlights of technological challenges concerning new energy production & utilization techniques; energy policy.

c08 FS 119A: Energy: Demands, Resources, Technology & Policy.
Past & estimated future demands; renewable & non-renewable resources; economic impact of energy use; environmental impact; conservation in manufacturing, transportation, home use; policy.

c09 Society & the Sea.
Ocean resources, pollution, coastal zone management, military aspects, oceanographic research, etc.

Skinner & Turekian; Pirie; Friedmann.
Fac: GL Wick-Scripps Institute
'H Bradner-AppliedMech& EngSci
U

c10 Technology, Ecology, Morality.

c11 Quantitative Aspects of Social & Environmental Problems.

c12 Transportation: A Technology in its Societal Setting.

Future Plans: UCSD-Policy Center based on scientific input.

0370 UNIVERSITY OF CALIFORNIA MEDICAL CENTER
San Francisco, CA 94143

p01 Joint Program in Bioethics--with the Pacific School of Religion (JPB)

Abbreviations:
HPP = Health Policy Program
PSR = Pacific School of Religion
DM = Department of Medicine

c01 JPB: Bioethics Workshop I.	b & ja; f; av. Fac: AR Jonsen DM 25s
c02 JPB: Bioethics Workshop II.	b & ja; f; av. Fac: AR Jonsen DM 25s
c03 JPB: Scientific, Ethical, & Legal Design of Clinical Research Involving Human Subjects.	Readings of protocols Fac: AR Jonsen, ML Parker, L Sheiner HPP, DM 12s
c04 JPB: Seminar in Medical Ethics.	b & ja Fac: K Lebacqz PSR
c05 JPB: Ethical Theory.	b & ja Fac: AR Jonsen, K Lebacqz PSR

Colloquia/Lecture Series

1. Quality of Life Lecture Series: for general health scis. center audience. Arranger: AR Jonsen-JPB.
2. Medicine & Ethics Conference: for medical staff at SF General Hospital. Arranger: SF General Hospital/JPB.

Future Plans: postgraduate fellowships in bioethics beginning September 1977 (3/yr).

0380 UNIVERSITY OF CALIFORNIA, SANTA BARBARA
Santa Barbara, CA 93106

Abbreviations: ES = Environmental Studies Program

c01 ES 25FS: Freshman Seminar in Environmental Studies. Introduction to current environmental problems & philosophy.

c02 ES/Soc 121: Environment & Society. Impact of social institutions on human-environment relations. Cultural conceptions of human-environment links.

c03 ES 125: Principles of Environmental Law. Introduction to history & methodology of law as it relates to man's use of environment.

c04 ES 126: Environmental Law: Advanced Study & Practice. Detailed analysis & practical experience in selected areas of environmental law.

c05 ES/Engl 141: American Literature & the American Environment. Study of the literary response to the American landscape.

Readings of various American novelists, poets, men-of-letters.

c06 ES 145: Field Methods in Environmental Impact Analysis. Field methods approach to environmental impact statement preparation; emphasis on understanding field data prepared by technical experts.

c07 ES 165A-B: Environmental Impact Analysis. A: analysis of environmental impact statement. B: focus on one local project & compare statements on it.

c08 ES/Hist 173T: Wilderness & Man: History, Meaning & Management. Significance of wilderness in world history; emphasis on man's relations to it both aesthetically & economically.

c09 ES/PolSci 190C: Laboratory/Seminar in Environmental Policy Problems. Examination through computer-based gaming & simulation of selected problems in environmental policy & politics.

c10 ES 192: Internship in Environmental Studies.
Opportunities to learn about practical approaches to environmental problem-solving by working under faculty direction as intern with local, state, & federal agencies concerned with environment or with private research & business organizations.

c11 Bio: Biology, the University, & Society.

c12 Chem: Chemistry: Its Methods & Implications for Society.

c13 Eng: Engineering, the University, & Society.

c14 Phys: Science, the University, & Society.

c15 The Atomic Age. Fac: L Badash
History of the Manhattan Project & the arms race.

c16 Special Topics in Atomic Age Problems. Fac: L Badash

c17 History of American Technology. Fac: C Pursell

c18 Social History of American Science. Fac: C Pursell

c19 History of the Military-Industrial Complex. Fac: C Pursell

c20 Politics of the Environment. Fac: D Mann

c21 Engineering Systems & the Environment.

c22 Material Development vs. Social Man. Fac: C Erasmus

c23 Technology & Culture. Fac: T Harding

c24 Competitive Processes in Human Ecology. Fac: G Hardin

c25 Environmental Economics. Fac: R Deacon

c26 Computers & Society. Fac: J Sonquist

Colloquia/Lecture Series

1. Lecture series on science/society topics: sponsored by several departments.

0390 UNIVERSITY OF CALIFORNIA, SANTA CRUZ
Santa Cruz, CA 95064

Abbreviations: K = Kresge College
M = Merrill College

c01	Coll V 160: Meso-American Cultures: Science, Metascience, Technology. Deals with questions such as: what was notion highly developed pre-Colombian cultures had of their physical world? Why did they have no wheel in a sophisticated socioeconomic culture?	Fac: C Heusch-Phys
c02	EnvStud 167: Resources, Technology, & Environment. Analysis of environmental problems connected with increased demand on limited resources.	b & ja Fac: D Burton Coll 8
c03	Hist 80: The Rise of Scientism in the Modern World. Investigation of importance of scientific ideas & attitudes to social & humanistic thought.	R Olson; Whitehead (1925); Bacon, St. Simon; Appleman; Barfield. Fac: R Olson, Z Bronstein Coll 8
c04	K 153: Science & Society. Current research trends & existing dogmas in relation to their impact on quality of human life.	Eiseley (1960); Wooldridge (1968); Castaneda; D Morris; Morgan; McLuhan; ja. Fac: H Helgard, C Poodig
c05	K 167: Women in Science. Women in sci. as students, in industrial & academic careers, & personal problems of professional working women.	Fac: D Kliger-Chem ES Switkes-Chem
c06	M 160: Science & Human Values. Effects of sci. on quality of human life. Values questions posed by sci. & tech.	Fac: FC Andrews
c07	M 182: Science & Technology in International Affairs. Specialized topical treatment varies from year to year. 1976: relations between developed & less-developed countries with emphasis on problems of food & industrialization.	Fac: visiting experts
c08	Soc 133: Sociology of Science. Examines scientists in various organizational relations.	Fac: B Sharon Coll 5

Colloquia/Lecture Series

1. Science & Technology in International Affairs: public lecture series within course given by Merrill College. For campus & area community.

0400 UNIVERSITY OF THE PACIFIC
Stockton, CA 95211

p01 Callison College Interdisciplinary Studies (CC)
Pacific Center for the Study of Social Issues (PCSSI)

Abbreviations: I&I = College of the Pacific Multidisciplinary Program

c01	CC: Environmental Problems & Perspectives. Global aspects of environmental problems & how they relate to politics, economics, & public attitudes.	Fac: S Anderson 1x; U
c02	CC: The Human Prospect. What man can expect in next century: social changes, political problems, challenges of tech., consequences of individual & collective behavior.	Fac: C Smith 1x; U
c03	RelStud 144/244: Social Ethics. Judeo-Christian & philosophical foundations of ethical decision making, applied to modern social issues: ecology, medicine, war & peace.	Fac: R Blaney PCSSI 9x; 22s
c04	RelStud 148/248: Biomedical Ethics. Behavior control, health care, population control, etc.	Fac: R Blaney PCSSI 3x; 34s
c05	NatSci: Environment, Culture, & Man. Development of evolutionary perspective on destructive effects of technological culture on Earth.	Fac: J Tucker 20s
c06	Phys 21: Physics & Its Fifth Dimension: People. Impact of physics on other scis. & on human social activities.	Fac: A Rodriques I&I 1x; 40s; U

Colloquia/Lecture Series

1. Forum on National Priorities: for students, faculty, community. Arranger: association of students of the U of Pacific.

0410 UNIVERSITY OF SOUTHERN CALIFORNIA
Los Angeles, CA 90007

p01 Center for Futures Research
p02 Center for Interdisciplinary Humanistic Studies
Environmental Management Institute (EMI)
Office of Interdisciplinary Programs (OIPD)
p03 Socio-Engineering Curriculum (SE)

Abbreviations: TH = Thematic Option for General Education
SC = Annenberg School of Communication

c01 EMI 538: Administration of Environmental Law.
Current federal & state legislation.
b & ja
G

c02 Eng 120: Systems, Society & Solutions.
Problems arising from interaction of systems in modern society (e.g., medical, industrial, political, scientific, educational). Problem analysis & methods of solution from engineering perspective.
b & ja
Fac: R Bellman
SE
1x; 20s

c03 Eng 122: Problem Solving.
Formulation of problems in modern society & tech. Tools, concepts, & philosophy of problem solving from engineering point of view, relevant to diverse disciplines.
b & ja
Fac: G Bekey
SE
1x; 20s

c04 Eng 125: Technology & Society.
Impacts of tech. & society on each other. Modern problems of society involving war, environment, communications, etc. related to tech.
b & ja
Fac: M Gerstein
SE
4x; 20s

c05 Eng 474: Societal Problems & Engineering.
Will be taught as 4 courses:
b & ja
-Economics theory.
Fac: J Niedercorn-Econ
-Political processes & how they impinge upon technological decisions.
Fac: JR Schmidhauser-PolScl
-Decision making--mathematical models of decision making under conditions of uncertainty.
Fac: W Edwards-Psych
-Management decision making & organizational theory.
Fac: A Gutenberg-Mgmt
SE
1x

c06 Astron 385TH: Astronomy's Contribution to Culture.
Emphasis on cultural, philosophical, & historical aspects of astronomy.

c07 Biochem/Dent 400TH: Social, Economic, & Political Influences on American Scientific Policy.
Social, economic, & political influences that shape American sci. policies in 20th C.

c08	Econ 155TH: Economics of Ecological & Urban Problems. Economics perspectives on the ecological & urban crises.	
c09	Engl 285TH: Computers & Human Values. Introduction to use of computer & implications of computer in humanities, especially literature & the arts, & society in general.	
c10	Hist 310TH: Nature vs. Technology: Conflict in American Values. Interdisciplinary examination of conflict between American's reverence for nature & veneration of tech.	
c11	PolSci 448TH: The Politics of Peace. Issues of war prevention, including social justice, ecological balance, large-scale social change, impacts of sci. & tech., & political processes relating ntl & transntl institutions.	
c12	Plng&UrbStud 625: Public Policy & the Urban Environment. Interaction of demographic, technological, economic, social, & political factors in urban environment.	b & ja G
c13	Plng&UrbStud 636: Environmental Impacts. Impact of environmental legislation on social systems.	b & ja G
c14	PubAd 501: Privacy & Confidentiality. Impact of information systems on social systems.	b & ja Fac: Baraba (visiting lecturer) G
c15	PubAd 501: Automation & the Criminal Justice System. Nature, role,& effects of automation & information systems in criminal justice community.	b & ja Fac: DeBalogh G
c16	PubAd 575: Science, Technology, & Government.	b & ja G
c17	SC 550: Transportation-Telecommunications Tradeoff. Societal effects of introduction of telecommunications & computer alternatives to transportation.	b & ja; n. Fac: JM Nilles lx

Future Plans: the following research projects are planned:

1. Research on the effects of telecommunications & transportation on society--sponsored by OIPD/Schools of Engineering, Business Administration, & Communications.
2. Research on solar energy--public policy implications--sponsored by OIPD/Sea Grant Program, Department of Political Science, & School of Engineering.

0420 WESTMONT COLLEGE
Santa Barbara, CA 93108

Abbreviations: I = interterm

c01	Bio 131: Origins. History & evidences of theory of evolution, including look at religious & social implications.	Bube; Goudge; Nogar; Schaeffer. Fac: R Senter
c02	I 460: The Bio-Psycho Technology of Change. Societal implications of techniques recently developed in biology & psychology.	Skinner (1948; 1971); Baer; Hamilton. Fac: Ensign, Rulon
c03	I 475: Cybernetics: Its Nature, Application & Implications.	Wiener; Apter. Fac: Furnish, Neu
c04	NatSci 1: Introduction to Scientific Thought. Historical development of main themes in sci., effect on western man's world view, implications for future.	CRM Fac: G Blount
c05	NatSci 55: Science & Society. Stresses on society & environment by civilization & tech.; possible solutions; how to avoid in future.	ja; f; Commoner; Ellul (1964); Storer; Snow (1964). Fac: F Rawlings

Future Plans: Science Division project on efficient energy production & utilization in a semiclosed community. This includes construction of pilot solar stills & heaters.

COLORADO

0430 COLORADO STATE UNIVERSITY
Fort Collins, CO 80523

c01	Chem 103: Chemistry, Man, & Society.	Hill Fac: NA Daugherty

c02 CivEng 638: Environmental Assessment.
Hendricks
Fac: DW Hendricks

c03 CivEng 639/Soc 739: Technology Assessment & Social Forecasting.
Procedures for evaluating impacts & forecasting alternatives.
Helmer; Teich.
Fac: E Vlachos

c04 ElecEng 200: Engineering & Society.
Historical perspectives; impact of tech. on society; future prospects.
Davenport & Rosenthal; de Nevers.
Fac: CC Britton

c05 ElecEng 401: Introduction to Cybernetics.
Systems approach to solving social, economic, political, ecological, & biological problems.
Wiener
Fac: D Graupe

c06 Hist 279: History of Technology.
Relation of tech. to culture, environment, & history.
Klemm; Jungk.
Fac: D McComb

c07 Phys 210: Physics & Society.
Relativity, quantum theory, energy, determinism & free will, & nature of sci.
Schrooer
Fac: S Kern

c08 Radiology&RadiationBio 310: Nuclear Technology & Society.
Medical, societal, & ecological implications of nuclear tech.
Steinhart & Steinhart
Fac: AW Alldredge

c09 Soc 460: Technology, Culture & Society.
Tech. as social phenomenon interacting with organizational & institutional structures & cultural values.
Bernard & Pelto
Fac: DM Freeman

0440 REGIS COLLEGE
Denver, CO 80221

c01 Econ: Human Capital.

c02 RelCult 382: Bio-Ethics.
Crisis points created by advancing medical tech.
b & ja
Fac: Finney, Pace, Bowles, Bresnahan, Duffy

0450 UNIVERSITY OF COLORADO
Boulder, CO 80302

p01 Master of Science Degree Program in Telecommunications

c01 AeroEng 500: Environment & Public Policy.
Independent study.
Fac: MS Uberoi

c02 AeroEng 552: Systems Analysis II. Understanding limitations, uses, & misuses of tech. Structure & functions of ecological, industrial, political, & military systems.
Fac: staff

c03 ChemEng 501: Environmental Modeling.
Fac: staff

c04 ChemEng 502: Technology Assessment.
Fac: F Kreith

c05 EngDesign&EcoEval 151: Engineering & Technology in History.
Fac: BA Beck

0460 UNIVERSITY OF COLORADO
Denver, CO 80202

c01 Phys 133: Limits to Growth.
Meadows, et al.
Fac: J Shonle
lx; 45s

Future Plans: a master's program in environmental engineering has been proposed.

0470 UNIVERSITY OF DENVER
Denver, CO 80210

p01 Technology, Modernization, & International Studies (TMIS)

c01 TMIS: Technology & Modernization. Invention, innovation, diffusion, transfer, assessment, & forecasting. Relationship between tech. & economic, social, political, & cultural change within intnl context.
b & ja
Fac: JS Szyliowicz, T Schlie, J LaVita

c02 TMIS: Management & Planning of Technology.
b & ja
Fac: T Schlie & associate

c03 TMIS: Analytical Methods for Technological Decision Makers.
b & ja
Fac: J LaVita

c04 TMIS: Technological Processes. Basic resources upon which tech. depends from point of view of availability, distribution, & ultimate usages. Role & level of tech. in different sectors.
b & ja
Fac: G Milliken

Future Plans: development of an undergraduate program in tech. & intnl studies.

CONNECTICUT

0480 ALBERTUS MAGNUS COLLEGE
New Haven, CT 06511

c01 Chem/Phys/Soc: Human Life & the Environment: Some Physical & Social Dimensions.

Turk, Turk, Wittes, & Wittes (1972); Day, Fost, & Rose; M Mead.
Fac: EC Patterson-Phys
E Nemethy-Chem
A Day-Soc
50s; U

c02 Hist/Phys: Selected Topics in the History of Science.
Emphasis on social history of sci.

b & ja
Fac: EC Patterson
3x; 6s; U

c03 PhysSci: Readings in Physical Science.
Examination of special topic of sci. & society.

b & ja; n.
Fac: EC Patterson
5x; 10s; U

c04 PhysSci: Science & Ideas.
Examination of successive models of universe created by western man to explain observed physical phenomena.

b & ja; n; av.
Fac: EC Patterson
12x; 20-30s; U

Future Plans: additional courses in environmental sci.; development of course in ethics of sci.; participation by physics department in team teaching efforts of other departments & general studies courses to bring sci. component into materials & areas covered in such courses (e.g., a sci. & society course with political scientists & economists; course in 19th C British literature emphasizing industrial novels & effect of sci. on the writings of authors of this period).

0490 HOUSATONIC COMMUNITY COLLEGE
Bridgeport, CT 06608

c01 Bio 207: Science & Society.

b & ja
Fac: M Vecchiarelli
5x; 50s; U

0500 MOHEGAN COMMUNITY COLLEGE
Norwich, CT 06360

c01 Sci: Energy Survival.
Progress toward energy self-sufficiency on large & small scale.

Fac: S Gaby

0510 RENSSELAER POLYTECHNIC INSTITUTE OF CONNECTICUT, INC.
Hartford, CT 06120

Abbreviations: EST = Environmental Science & Technology

c01 EST 31.697-2: Environmental Management & Society. Emphasis on policies & actions which intentionally or inadvertently become driving forces in society & create/modify environment.
Fac: GM Northrop

c02 EST 31.697-5: Environmental Economics & Cost Analysis. Relationship between economic growth & deterioration of environment. Application of cost-benefit analysis to environmental issues.
Fac: F Egan

0520 UNITED STATES COAST GUARD ACADEMY
New London, CT 06320

c01 Hum/Phys&OceanSci 2402: Science & Society. History & philosophy of sci.
Daedalus; Kuhn; Mason; Muller (1970).
Fac: RW Schneider, DA McGill, TJ McKenzie, PM Regan
30s

c02 Science, Technology, & Man.

0530 UNIVERSITY OF CONNECTICUT SCHOOL OF LAW
West Hartford, CT 06117

c01 Law: Problems of Human Experimentation. Relation between social sci. research & medical ethics; consideration of locus of authority appropriate to various classes of decisions required to be made in human experimentation.
Katz; ja.
Fac: CJ Scanlon
lx

c02 Law: Law & Social Science. Social sci. methodology & its use in legal analysis.
b & ja
Fac: P Shuchman, AD Cullison

c03 Law: Law & Technology. Impact upon legal concepts, techniques, & institutions of choices & decisions compelled by technical innovation in selected areas, especially biomedical tech.
Kuhn; Ferkiss (1969); Tribe; Habermas; ja.
Fac: HC Macgill
lx

c04 Law: Philosophy of Law. Law in terms of logic & philosophy of sci.
ja
Fac: RL Birmingham

47

0540 WESLEYAN UNIVERSITY
Middletown, CT 06457

p01 College of Science in Society (CSIS)

Abbreviations: CSS = College of Social Studies
CLR = College of Letters & Religion
SP = Science Program

c01	CSIS 211: Man the Myth-Maker. Nature of scientific activity, its differences from & similarities to other ways of seeking knowledge, relation to ethics & practical problems in its effects.	b & ja Fac: BC Bell, FR Blackford Anthro 1x; 15s
c02	Hist 253: History of Scientific Thought to 1700. Examination of evolution of mathematical, physical, & natural scis. as aspect of human culture.	b & ja Fac: S Gillmor CSIS 4x; 10s
c03	Hist 254: History of Scientific Thought Since 1700. Emphasis on scientific developments from Scientific Revolution of 17th C to Quantum Revolution in 20th C physics.	b & ja Fac: S Gillmor CSIS 6x; 15s
c04	Sci 104: Ideas & Inquiry in Science. Focuses on some particular problems in society with scientific interfaces.	b & ja; f; av. Fac: JJW Baker SP, CSIS
c05	Sci 301: Analysis of Models of Social Phenomena. Critical evaluation of reports on a few major contemporary issues, e.g., costs & benefits of Clean Air Act.	Fac: M Kac & staff Math, CSIS
c06	Anthro 286: Images of the Future. Ideas, images, & models of future presented in works of scientists in different disciplines; exploration of experimentation with alternatives already underway.	Fac: Z Levak 2x
c07	Art 216: Seminar in Urban Environment. Economic, social, political, & technological forces influencing location, growth, & form of urban areas.	b & ja Fac: N Frederiksen Invited speakers
c08	CLR 240: Creation & Creativity: the Rise of Modern Science. Historical interplay of religious presuppositions & emergence of modern scis., chiefly in 17th C England.	n.s.: Bacon, Boyle, Newton, Helmont, the Puritans, et al. Fac: E Klaaren

c09	CSS 204: Social Ethics in Technological Society. Examination of adequacy of selected social ethical paths against background of current interpretations of technological society.	n.s.: Ellul, Habermas, Tillich, King, Niebuhr, et al. Fac: E Klaaren
c10	Econ 208: Economics of Health & the Health Industry. Public policy questions in health industry, i.e., economic efficiency vs. technical efficiency in choice of mode of treatment.	b & ja Fac: M Mueller 10x
c11	Econ 216: Economic Aspects of Technological & Environmental Change. Economic influences on rate & direction of technical change & environmental problems.	Nelson, et al.; AM Freeman, et al.; Dorfman & Dorfman; b & ja. Fac: J Rasmussen CSS 15s
c12	Hist 330: History of Science & Technology in America. Intellectual, social, & educational aspects of sci. & tech. in America from colonial times to modern age.	b & ja Fac: S Gillmor 4x; 8s
c13	Sci 204: Environment, Technology & Health. Health effects of technologic intrusions in the environment. Use of renewable & non-renewable resources considered.	Bernarde; Murdoch. Fac: W Hall SP 15s
c14	Sci 220: Problems in Human Population & Ecology. Issues in human population & ecology related to quality & nature of life in rapidly changing world.	b & ja Fac: A Johnson

0550 WESTERN CONNECTICUT STATE COLLEGE
Danbury, CT 06810

c01	Bio 127: Man in Biological Equilibrium. Health of human organism as affected by natural, social, & technological developments.	b & ja Fac: TM Butterworth 20s; U
c02	Bio 128: Biology & Society. Ethical & social implications of present & future technological developments.	b & ja Fac: TM Butterworth 20s; U
c03	Phys 102: Physics, Man & Society. Major technological developments of recent centuries & how they affect man & the society in which he lives.	WB Phillips Fac: J Friedman 20s; U

0560 YALE UNIVERSITY
New Haven, CT 06520

p01 History of Science & Medicine (HSM)

Abbreviations: Course numbers beginning with "CS" refer to College Seminars in Residential Colleges; these courses change each year.

c01 HSM 25a/123a/Phys 35a: The Emergence of Modern Physics. Fac: MJ Klein
Emphasis on conceptual developments.

c02 HSM 28a/129a: History of Medicine. Fac: G Rosen
Evolution of medicine viewed as function of social activity.

c03 HSM 124a: Science, Technology, & Society. Fac: D Price
Survey of development of sci. & tech.

c04 HSM 125b: Sociology & Politics of Recent Science.

c05 HSM 145a,b: Science & Society in the 19th C.

c06 HSM 167b: Historical Backgrounds of Psychoanalytic Thought.

c07 Bio 10a: Biology & Human Affairs. Wilson, et al.; HCR.
Fac: AW Galston

c08 CSBK/CSSY 38b: The Physician in Society. Fac: HM Spiro, H Paris
Physician's changing role in society & new possibilities for health delivery systems in light of changing social demands.

c09 CSDC 35a: Modern Science Fiction. Fac: MA Rose

c10 CSDC/CSTC 38a: China, Chinese Medicine, & the Chinese Medical System. Fac: JJ Kao
Meaning of health & disease, relationship between healer & healed, conditioning of these by personal, social, & cultural beliefs.

c11 CSTD 02a: Ethical Problems in the Medical Care of Children. Fac: RH Granger

c12 CSTD 18a,b: Environmental Policy Making: the Case of Electric Power. Fac: PH Judd

c13	CSSY 02b: Perspectives on Recent Biological & Medical Research. Includes genetic diseases, sex determination, transplants, biological alternatives to pesticides & herbicides, carcinogenesis & strategy of drug development, chemical & physiological control of the mind.	Fac: RE Handschumacher, RS Miller
c14	CombSci 87b, 88a: Multidisciplinary Seminar on Environment & Man. Case studies in problems of environment. Relationship of methodologies of social & natural scis. to problems of environment.	American Chemical Society; Dorfman & Dorfman; Sims & Baumann; Roos. Fac: CA Walker
c15	Eng&AppliedSci 15a: The Next Thirty Years. How tech. & society might react when natural resources run short.	NAS (1974); Slack; Hundley; York; Snow (1961); Meadows, et al.; Inglis; SA (9/71). Fac: A Herzenberg
c16	Forestry&EnvStud 322a: Preservation: Economics & Policy. Analysis of economic, planning, & political issues raised by preservation.	
c17	Forestry&EnvStud 341a: Seminar in Sociology of Natural Resources. Application of contemporary & classical theories of social change to specific cases of environment planning in urban environment.	
c18	Hist/AmerStud 84b: American Cultural & Intellectual History: the Late 19th & 20th Centuries. Includes study of intellectual & imaginative responses to modern sci. & tech.	Fac: DB Davis
c19	Phil 32-1a: Philosophical Approaches to Science. Structure of scientific theories, nature of scientific activity, scientific world picture.	Fac: FS Oscanyan
c20	Phys 49b: Topics in Science & Society. Includes tech. of energy supplies & their environmental effects.	Fac: HL Kraybill
c21	PolSci 33b: Problems of Defense & National Security. Emphasis on problem of controlling nuclear weapons.	Fac: BC Hanson

c22 Soc 21b: Social Relations of Science & Technology. Fac: BH Gustin
Major themes in comparative social history of modern sci. & tech.

Colloquia/Lecture Series

1. Regular Departmental Colloquia in History of Science & Medicine: for faculty & graduate students.

Future Plans: continuing research within HSM on quantitative methods in sci. policy.

0570 YALE UNIVERSITY LAW SCHOOL
New Haven, CT 06520

p01 Program in Law, Science & Medicine (LSM)

c01 LSM: Law & Medicine I: Human Experimentation. Fac: J Katz
From vantage point of each of major participants, at various stages in decision-making process.

c02 LSM: Law & Medicine II: Informed Consent. Fac: J Katz
Historical development & current status.

c03 LSM: Controlling Progress. Fac: G Calabresi
Advantages & disadvantages of some methods available to society for controlling devices & activities which bring benefits but also entail harm to society.

c04 LSM: On the Law's Capacity for Social Control. Fac: J Goldstein, B Marshall
Examines capacity to control or regulate persons, institutions, & events through study of problems of genetics, Attica, dam breaks, My Lai, Lusitania.

c05 LSM: Sociology of Science & Medicine. Fac: JK Guben
Structural, historical, & ideological bases of the scientific establishment & the practice of medicine.

c06 LSM/InternalMed 147: The Chronically Ill Patient. Fac: DC Duncombe
Ethical & legal problems. Emphasis on emotional & psychic dynamics of serious illness.

c07 LSM: Environmental Regulation of Transportation. Fac: R Brown
Legal, scientific, & economic impact of Clean Air Act of 1970.

Colloquia/Lecture Series

1. Law, Science & Medicine Colloquium: monthly; primarily for the benefit of Fellows in the program, but open to others in the Yale community.

DELAWARE

0580 UNIVERSITY OF DELAWARE
Newark, DE 19711

p01 Culture of Biomedicine (CBM)
p02 Marine Affairs Program--in College of Marine Studies (CMS)
p03 Science, Technology, & Society (STS)

c01 CBM: Critical Thinking, Biomedical Ideas & Culture.
Man's pre-scientific understanding of disease & death; nature, significance, & evolution of scientific method; social impact of biomedical concepts.

c02 CBM: Ethical Problems in Contemporary Biomedicine.
Genetic engineering, euthanasia, human experimentation, biomedical control of human behavior.

c03 CBM: Society & the Health Professionals.
Medical quackery, emergence of scientific biomedicine, medical orthodoxy, history & nature of medical professionalism, politics of biomedicine.

c04 CBM: The American Health Care Delivery System.
Functions & deficiencies of health care delivery, especially in terms of its social & humanistic involvements.

c05 CMS 680: Concepts in Applied Ocean Science. Fac: Gaither
Engineering as profession based on laws of nature & needs of mankind; economic constraints.

c06	Phil 207: Technology & Values. Technological culture from perspectives of social, political, & legal philosophy.	Gewirth; n.s.: Ferkiss, Marcuse, Skinner, etc. Fac: P Durbin STS
c07	Phil 647: Science & Society Seminar. Model for an adequate philosophy of technological society. Contrast with other approaches to philosophy of tech.	Mitcham & Mackey Fac: P Durbin STS
c08	PolSci 600: Science & Public Policy. What life would be like in a "scientific" state.	n.s.: Price, Greenburg, Lakoff; ja. Fac: D Rich STS
c09	Hist 167: The Automobile in American Society. Historical, social, economic, & psychological significance of automobile in 20th C America.	Rae; Chandler; Nader; Leavitt; Robbins; Felsen. Fac: G Basalla 15s; U
c10	Hist 380: Science Fiction as Social Criticism. Historical & sociological study of sci. fiction of US, Russia, France, & England.	n.s.: Verne, Wells, Heinlein, Herbert, Clarke, Asimov, Vonnegut, Burgess, Lem, etc. Fac: G Basalla U
c11	Hist 381. Future as Utopia. Historical & analytical approach to futurological & utopian studies.	Fac: G Basalla
c12	Hist 383: Science, Technology, & Society I.	Fac: G Basalla U
c13	Hist 384: Science, Technology, & Society--Part Two.	Fac: G Basalla U
c14	Hist 386: Technology in Western Civilization. Historical origins of desirable & undesirable aspects of our technological civilization.	Fac: E Ferguson
c15	Hist 483: Women in Science. View of female in writings of natural philosophers, scientists, & physicians of past. Attitudes toward women reflected in sci. texts/home & health manuals written for women. How & where barrier to women entering sci. broke down.	Fac: J Beer U
c16	Hist 486: War, Business, & the Chemical Industry.	Fac: J Beer

c17 Hist 683: History of Science I. Fac: J Beer
Observation & analysis of gradual maturation of scientific method. Role of sci. in different eras & cultures.

c18 Hist 686: Studies in the History of Technology. Fac: E Ferguson
Critical review of "popular" histories of American tech.

c19 Hist 865: American Science & Technology. Fac: E Ferguson
Critical review of American Industrial revolution, rise of scientific establishment, complex relationships among sci., tech., resources, & society.

c20 HLS 604: History of the Biomedical Science. Fac: E Lurie
18th C to present. Emphasis on developments in biological scis. that had direct relationship to professionalization of clinical biomedical scis. since mid-19th C.

Future Plans: Philosophy Department-sponsored interdisciplinary University of Delaware Values Institute; if funded, this program will absorb STS. It will bring humanists together with those directly involved in current social problems. Contact person: F Dilley.

DISTRICT OF COLUMBIA

0590 THE AMERICAN UNIVERSITY
Washington, DC 20016

p01 Science/Technology Policy & Administration Program (STPA)

c01 55.513(STPA): Change & the Managerial Process. G
Effects of technological & scientific development on the organizational, operational, & staff functions of the public or private administrative establishment.

c02 55.571(STPA): Technological Forecasting & Assessment. G
Review of principal methodologies of technological forecasting. Relationship to planning, tech. transfer, & assessment.

c03 55.670(STPA): The Politics & Economics of Research & Development. G
Magnitude, characteristics, & politico-economic significance of R&D economy of US &, comparatively, of other countries.

c04 55.671(STPA): Research & Development in the Total Organization. — G
Capabilities of scientific, technological, & social sci. research; utilization for needs of the specific organization.

c05 55.672(STPA): Scientific & Engineering Manpower. — G
In-depth study of scientific & engineering manpower, stressing role of individual in R&D environment & his interface with total resources of which he is part.

c06 55.673(STPA): Planning & Control of Research & Development Operations. — G
In-depth study of role of today's R&D manager. Forecasting, planning & programming techniques, analysis methodology.

c07 57.770(STPA): Seminar in Research & Development Management. — b & ja
Similar to 55.673 in content. — Fac: LH Hattery
G

c08 Govt&PubAd: Science, Technology, & Government. — b & ja
G

c09 Govt&PubAd: Public Management of Science. — G

c10 Govt&PubAd: Science & Technology in International Affairs. — G

c11 Chem: Chemistry & Society. — U

c12 Phys: Science, Culture & Life Styles. — U

c13 Phys: Science & Public Policy. — U

c14 Phys: Arms Control, Politics & Science. — U

0600 GEORGETOWN UNIVERSITY
Washington, DC 20057

p01 Center for Bioethics (CB)

Abbreviations: SCE = School of Summer & Continuing Education

c01 CB/Theol: Bioethics. — Fac: L Walters

c02 CB/Phil: Moral Problems. — Fac: TL Beauchamp, L Walters

c03 CB/Phil: Readings in the Philosophy of Biology & Medicine. — Fac: L Walters

c04	CB/Ob-Gyn: *Medical Ethics.*	Fac: RC Baumiller
c05	CB/Theol: *Law, Justice & the Biomedical Fields.*	Fac: JF Childress
c06	CB/Phil: *Philosophy of Biology I: Theories of the Organism.*	Fac: LR Kass
c07	CB/Phil: *Ethical Issues in Human Experimentation.*	Fac: L Walters
c08	CB/SCE: *Ethical Issues in Abortion.*	Fac: J Connery
c09	CB/SCE: *Manipulation: Threat to Freedom.*	Fac: B Haering
c10	ForeignServ: *International Environmental Affairs.*	Caldwell; Cole, et al.; Meadows, et al.; SCEP; Goldman. Fac: H Kellerman
c11	Govt: *Science, Technology, & Politics.*	Teich; Mesthene; Ferkiss (1969); Ben-David; Blissett. Fac: V Ferkiss
c12	Law: *Seminar on Law, Medicine, & Ethics.*	Fac: several Law faculty members
c13	Phil: *Ethical Issues in Biomedicine.*	Fac: TL Beauchamp
c14	Theol: *Science, Myth, & Religion.*	Fac: J Haught

Colloquia/Lecture Series

1. *Bioethics Colloquia:* for university & area residents. Arranger: L Walters, CB.

Future Plans: graduate program in bioethics.

0610 GEORGE WASHINGTON UNIVERSITY
Washington, DC 20052

p01 *Graduate Program in Science, Technology & Public Policy* (STPP)
p02 *Program of Policy Studies in Science & Technology* (PSST)

Abbreviations: DEP = Division of Experimental Programs
PIA = School of Public & International Affairs

c01	PolSci 205: Government, Science, & Technology. Demands on ntl & intnl political systems as result of impact of scientific & technological developments; responses of governmental institutions & processes to these demands.	b & ja Fac: J Logsdon STPP 5x; 30s; Srs, G
c02	BusAd 220: Administration of Research & Development. Examination of technological, political, & economic factors affecting R&D environment.	Fac: D Roman, Adams G
c03	BusAd 222: International Research & Development. Technological, political, social, & economic factors affecting intnl R&D policy.	Fac: D Roman G
c04	BusAd 229: Seminar: Administration of Research & Development. Individual &/or group in-depth research projects dealing with various phases of R&D management.	Fac: D Roman G
c05	BusAd 290: Readings & Research on Technology Assessment.	ja Fac: J Coates, V Coates PIA 2x; 12s; G
c06	EngSci 201: History of Technology I. Characteristic techs. of prehistory, Ancient Near East, Greece, Rome, Byzantium & Islam, Christian Europe. Tech.'s interactions with other cultural forces.	20s; G
c07	EngSci 211: History of Technology II. Development of tech. of Atlantic community & influence throughout world.	G
c08	Hum 26: Environmental Issues. Population, pollution, urban environment, economic growth & development, tech. & public policy.	Fac: RS French, KJ Langran, SO Schiff DEP, BioSci, Geog&RegionalSci 3x; 25s; U
c09	Hum 37: Computer Technology & Social Issues: the Search for New Alternatives. Study of selected social issues related to developing computer tech.; applications & long-range implications of new tech.	Fac: CC Mondale & interdisciplinary team 1x; 52s; U
c10	Hum 174: Seminar: Science & Values.	b & ja Fac: WE Schmidt ExperimentalHum 1x; 7s

c11	PolSci 108: Science, Technology, & Politics. Multiple impacts of scientific & technological developments on political system. Public policies for use, support, & control of sci. & tech.	ja & b Fac: J Logsdon 5x; U
c12	PolSci 206: Science, Technology, & Public Affairs.	ja Fac: J Logsdon 5x; 15s; G
c13	PolSci 208: Science, Technology, & World Order. Focus on selected examples of interaction of tech. & intnl politics.	Nau; S Brown; Skolnikoff; Pisar; ja. Fac: HR Nau 5x; 20s; G
c14	PubAd 235: Technological Change & Manpower. Manpower problems arising from automation & other technological changes.	Fac: DD Roman
c15	PubAd 262: Seminar: Science, Technology, & Public Policy. Impact of sci. & tech. on public administration in terms of administrative practice & ntl policies.	Fac: G Black PIA 10x; 15s

Colloquia/Lecture Series

1. Faculty Seminar on Science & the Humanities: for faculty & graduate students. Arranger: WE Schmidt.
2. Professional Seminar on "US National Goals & Technological Strategy": for professionals in sci. & tech. in Washington, DC, faculty, & graduate students. Arranger: JM Logsdon.

0620 GEORGE WASHINGTON UNIVERSITY SCHOOL OF LAW
Washington, DC 20052

Law, Science & Technology Program

Abbreviations: NLC = National Law Center

c01	Law 491: Science Policy Formulation. Important government decisions in sci. & tech.; role of law as sci. policy implement.	Fac: FR Anderson NLC 2x; 12s; L
c02	Law 492: Seminar: Science & the Legal Process. Reciprocal relationships between law & sci.; techniques & procedures in handling, developing, & deciding scientific issues.	Tribe; ja. Fac: HP Green NLC 9x; 25-30s; L
c03	Law 493: Intergovernmental Aspects of Technological Change. Role of tech. in breaking down political barriers.	NLC 1x; 12s; L

c04	Law 494: Use & Control of Atomic Energy & Space Technology. Impact of advanced techs. on law & legal institutions.	Fac: JT Ramey, M Maisch NLC 3x; 20s; L
c05	Law 495: Legal Protection Against Technological Hazards. Emphasis on progress of reconciling protection of public with desire for rapid progress.	Fac: Dembling, Brown NLC 2x; 30s; L

0630 HOWARD UNIVERSITY
Washington, DC 20059

c01	CityPlng 233-605: Urban Social Problems. Contemporary social problems of urban community in tech.-society relationship; impact of social & political structures of urban community on these problems.	Fac: L Fry 35s; G
c02	CityPlng 233-717: Introduction to Transportation Planning. Fundamentals of transportation planning process; socio-institutional environment within which that process/system functions. Recent methodological innovations & tech.	b & ja Fac: staff 30s; G
c03	CompSci 001-004: Computers & Society. Sociological significance & cultural impact of computers on society.	b & ja Fac: staff 40s; U
c04	Comm 470-002: New Communications Technology. Implications of new developments on mass media & society. Future projections.	Fac: E Monroe 1x; 35s; U
c05	Comm 470-015: Communications Computer Technology. Computer programming usage as applied to techniques of mass communication in society.	b & ja Fac: C Sutton 25s; U
c06	MechEng 304-439: Special Engineering Problems. Coverage of special topic of current interest including effect on society.	Fac: S Davis 1x; 35s; U
c07	Soc-Anthro 027-150: Economic Anthropology. Relationship of economic organization, ecology, & tech. to institutional organization & culture.	b & ja Fac: C McDonald 1x; 40s; U
c08	Soc-Anthro 027-172: Invention & Technology. Survey of fundamental techniques & inventions; their possible origins & diffusions.	b & ja Fac: staff 30s; U

c09 Soc-Anthro 202-270: Man & Environment. Interrelationships of man & culture with natural environment.
Fac: staff
1x; 25s; G

Colloquia/Lecture Series

1. WHUR Science & Technology Series: for faculty, students, & area residents. Arranger: General Manager, WHUR.

0640 THE NATIONAL WAR COLLEGE
Washington, DC 20319

c01 Energy Issue & Resource Scarcity. Nature & Impact of current & pending shortages of raw materials on US; whether these stem from physical shortages & competition from them, or from actual or potential withholdings by governments or cartels.
b & ja
Fac: Emrick

c02 Geography, Technology & the Interconnected World. Interrelationships of ntl power, tech., & geography. Problems of exploration, communications, transportation, etc., taking into account full potential of land, sea, & space environments.
Fac: Emrick

FLORIDA

0650 FLORIDA AGRICULTURAL & MECHANICAL UNIVERSITY
Tallahassee, FL 32307

c01 ASI 301-302-303: Interdisciplinary--Environmental Crises & Man's Survival. Implications of social & natural scis. in ecology.
b
Fac: G Maxwell-PolSci
Ocampi-Bio
Gadson-PhysSci

c02 ASI 310-311-312: Augmented Man: Computers in Modern Society. Place of computerization in modern society; possibilities & limitations of computers.
Rothman & Mosmann
Fac: G Humphrey
faculty from PolSci, Phil, Bio, Phys, Econ

0660 FLORIDA ATLANTIC UNIVERSITY
Boca Raton, FL 33432

c01 MechEng 301: Engineering in a Technological Society. Engineering tech. & impact on society.
DeNevers
Fac: staff
35s

c02	PolSci 620: Seminar in Environmental Politics & Administration. Constitutional, political, administrative, & geographic factors in development of environmental politics.	Golembiewski, Welsh, & Crotty Fac: R Thomas 12s

0670 FLORIDA INTERNATIONAL UNIVERSITY
Miami, FL 33144

c01	Phil/Rel 426: Man & Nature. Humanistic perspectives of scientific & philosophical interpretations of nature & environment.	Fac: J Huchingson 2x; 30s
c02	PubAdm 550: Values & Technology in the Post-Woodstock Generation. Societal value structures & how tech. creates alternatives to our existing value assumptions.	Fac: WL Tanner 2x; 50s
c03	Rel 406: Religious Values & Technology.	Fac: J Huchingson Phil
c04	Tech 300: Technology & the Future of Society. Futurism & the control of tech.	Fac: JS Mendell 5x; 12s
c05	Tech 301: Technology & Man. Interaction of tech. with man's motivation, emotion, decision, & control.	Fac: S deGroot
c06	Tech 302: Inventing the Future. Creativity techniques & ideas of futurism applied to technological & social innovation.	Fac: JS Mendell 2x; 12s

0680 FLORIDA SOUTHERN COLLEGE
Lakeland, FL 33802

c01	Bio 220: Conservation.	Wagner; ja. Fac: ML Gilbert

0690 FLORIDA STATE UNIVERSITY
Tallahassee, FL 32306

c01	Hist 405A/505A: Science in Early Western Civilization. Traces history of sci. from Stonehenge through Scientific Revolution. Long-range influences as well as immediate developments.	Mason; Smith; Vance; Kuhn. Fac: MM Vance 17x; U, G

c02 Hist 405B/505B: Science in Modern Western Civilization.
History of sci. from early 16th C to mid 20th C.
Mason; Smith; Schroeer.
Fac: MM Vance
17x; U, G

0700 FLORIDA TECHNOLOGICAL UNIVERSITY
Orlando, FL 32816

c01 AlliedHealthSci 502: Health Delivery Systems in the United States II.
Legal & ethical aspects of vendors & consumers.

c02 Bio 105: Biology & Environment.
Biological implications of interactions among human society, population, & tech. in relation to environment & natural systems.

c03 Chem 101: Chemistry & Society.
Descriptive approach to understanding of role of chemistry in human affairs.

c04 Chem 102: Chemistry & Society.
Continuation of 101.

c05 CivEng&EnvSci 503: Environmental Impact Assessment.
Evaluation, estimation, & prediction of effects of structures, processes, & systems upon environment & effects of environmental changes upon human populations.

c06 Econ 655: Environmental Economic Analysis.
Investigation of environmental problems, methods of economic analysis, policies of environmental protection, difficulties in making quantitative assessments of environmental damages.
G

c07 Eng 481: Man & Machine.
Influence & interrelationship of invention & technical progress on evolution of social forms & institutions.

c08 Eng 482: Engineering & Technology in History.
Important developments in engineering & tech. & their effect on society & our socio-economic processes & institutions.

c09 Eng 483: Technology & Social Change.
Existing theories of social change; analysis of role of tech. in social change; study of contemporary events in tech. & possible impact on society.

c10 Eng 484: Science in History.
Reciprocal relations of sci. & society from ancient to recent times.

c11 Eng 485: Topics in Urban Development.
Interrelationship of engineering, social, economic, & cultural phenomena.

c12 Eng 486: Energy & Man.
Forms available, requirements in technological society, solutions, & future predictions.

c13 Eng 488: Man & Environment.
Man's interaction with environment; engineering & non-engineering measures to insure improvement & maintenance of environmental quality.

c14 Eng 489: Computers, Cybernetics & Society.
Effects of computers & cybernetic revolution on individual & society.

c15 Eng 490: Engineering in Human Affairs.
Impact of engineering on modern society.

c16 Sci 480: Science in Human Affairs.
Interaction of sci. & scientific thought with quality of human life.

c17 Sci 481: Our Chemical Environment.
Role of modern chemical tech. in our society.

0710 SANTA FE COMMUNITY COLLEGE
Gainesville, FL 32601

c01 Bio 199: Energy, Man & Ecology.
Odum & Odum
Fac: B Odum

c02 PhysSci 100: The Sciences.
Survey of physical & biological scis. with emphasis on how sci. relates directly to student.
Fac: 10 different instructors

0720 UNIVERSITY OF SOUTH FLORIDA
Tampa, FL 33620

c01 Phil: Science, Technology, & Freedom.
Truitt & Solomons
Fac: WH Truitt

9.1

c02 Phil: Science & Values.
Michalos
Fac: GA Bell

Future Plans: proposal in preparation for NSF for series & research on "Values in Science & Technology."

GEORGIA

0730 CLARK COLLEGE
Atlanta, GA 30314

c01 Phys 100: Science & Society.
b & ja; r.
Fac: staff.

Future Plans: developing a proposal for a program on energy.

0740 DEKALB COMMUNITY COLLEGE
Clarkston, GA 30021

c01 Anthro 102: The Ascent of Man.
b; av.
Fac: A Roddy

c02 Bio 100: Biological Science for Terminal Programs.
Content varies; can have significant component on societal implications of sci.

c03 Bio 102: General Biology.
Emphasis on basic sci. & contribution of scientific method & information to societal decision making.
Villee
Fac: JB Murray, FW Aiken

c04 Early Western Civilization.
Sci. & tech. of: Ancient India, Ancient China, Ancient Asia, Ancient Egypt, Western Hemisphere, Islam, Greece, Rome.
Hastings; Bloch.
Fac: staff & invited speakers

c05 Modern Western Civilization.
Late 1600's to contemporary period. Tech., sci., & society.
Fac: staff & invited speakers

Future Plans: Formal courses which are not part of a specific program draw few students. Therefore, it is determined that the societal implications of sci. & tech. should be components of existing courses. A committee might be established to identify resources and meet with departments on specific instructions to help plan the enrichment of existing courses.

0750 EMORY UNIVERSITY SCHOOL OF LAW
Atlanta, GA 30322

c01	Law: Environmental Law. Legislative, administrative, & judicial methods for dealing with deterioration of scarce resources--air, water, coal, oil.	Hanks, Tarlock, & Hanks Fac: FJ Vandell
c02	Law: Environmental Law Seminar. In-depth examination of one or two of the critical current issues in environmental law.	Fac: FJ Vandell 20s
c03	Law: Products Liability. State & federal laws dealing with various products--drugs, automobiles, cigarettes, appliances. Role of federal agencies.	Keeton & Shapo

0760 GEORGIA INSTITUTE OF TECHNOLOGY
Atlanta, GA 30332

Center for Advanced Studies in Technology
Philosophy & History of Science & Technology Group

Abbreviations: PHS = Philosophy & History of Science (within SocSci)

c01	AS 2610: Air Power, the Early Years. Part of series of courses following development of aeronautic & space tech. & development of doctrine of use of this power to further political objectives. Analysis of ethics & morality of use of tech. in government & intnl affairs.	Gottel; Wright; Brodie & Brodie; Nesbitt; USAF. Fac: WA Olsen-AFROTC 40s
c02	AS 2620. WWII, Berlin airlift, & the Korean war.	Gottel; Wright; Brodie & Brodie; Nesbitt; USAF. Fac: WA Olsen 40s
c03	AS 2630: Air Power, the Later Years. Middle East, Cuba, Southeast Asia.	Gottel; Wright; Brodie & Brodie; Nesbitt; USAF. Fac: WA Olsen 40s
c04	Arch 4952a: Socio-Technical Problems of American Society.	Fac: Clarke 30s; U, G
c05	Hist 3030: Technology & Economic Change. Growth of tech. in modern world; its relationship to economic & social change.	Landes; r. Fac: M Kranzberg 10s

c06	Indust&SysEng 4056: Technological Forecasting.	Bright Fac: G Thompson 25s
c07	Indust&SysEng/PolSci 47xx: Technology Assessment.	Hetman Fac: A Porter 15s
c08	Indust&SysEng/PolSci 47xx: Issues in Technology Policy. Interaction between tech. & government.	b & ja Fac: F Rossini 10s
c09	NuclEng 1100: Energy & Engineers in Society. Includes discussion of energy demands & resources in US & world; place of nuclear power & responsibility of nuclear engineers.	Marion; SA (9/71). Fac: JN Davidson, JH Rust, & others 90s
c10	NuclEng 4620: Nuclear Technology & the Environment. Technical & social aspects of nuclear tech. that relate to natural environment & of nuclear techniques of value in pollution studies.	Fac: Eichholz 25s
c11	NuclEng 6643: Environmental Impact of Nuclear Power. Specific impact of nuclear facilities on environment. Preparation of environmental impact statements.	Fac: Eichholz 25s
c12	PHS 1127: Science, Technology & Human Values.	ja Fac: S Carpenter 50s
c13	PHS 1128: Introduction to the History of Science & Technology. Historical details; consequences of scientific, industrial, & technological revolutions.	Cardwell (1972); r. Fac: J Brittain 20s
c14	PHS 3117-8-9: History of Engineering. Emphasis on aspects of engineering with greatest importance for future development.	Kranzberg & Pursell; Klemm; Mumford. Fac: M Kranzberg 30s
c15	PHS 3120-1-2: Philosophy of Science. Includes social & ethical aspects of sci.	Kuhn; Lakatos & Musgrave; Churchman (1971). Fac: F Rossini 10s
c16	PHS 4106: Philosophy of the Behavioral & Social Sciences. Philosophical views of social sci.; relationship between natural & social sci.	Krimerman; Kaplan. Fac: F Rossini 10s

c17	PHS 4107: Philosophy of Technology. Selected problems such as interface between individual & tech., artificial intelligence.	Ferkiss (1974); Mitcham & Mackey. Fac: S Carpenter 15s
c18	PHS 4108: History of Technology in the United States. Development of tech. in US as interwoven with economic & social background & influence.	Layton; Pursell. Fac: J Brittain 15s
c19	PHS 4116: History of Electrical Science & Technology. Interpretive study of origins & evolution of electrical sci. & tech.	Brittain Fac: J Brittain 15s
c20	PolSci 4211: Science, Technology & World Politics. Impact of sci.-tech. on intnl system; role in foreign policy process.	ja Fac: D Papp 35s
c21	Soc 4306: Technology & Society. Social conditions which promote or retard technological activity.	FR Allen (1971) Fac: M Mitzner 15s

Future Plans: work in following areas: energy in a systems context; impacts of the energy crisis; analysis of health systems dynamics & developing nation dynamics.

0770 MACON JUNIOR COLLEGE
Macon, GA 31206

c01	Sci 150: Science, Technology, & the Citizen. How & why scientists think & act way they do; direction in which sci. & tech. contribute to human condition.	Meadows, et al.; Medvedev; Langford; av; ja. Fac: DF Dever

0780 MEDICAL COLLEGE OF GEORGIA
Augusta, GA 30902

p01 Humanities (H)

c01	H: Humanities Phase I Core Course. Function & significance of humanities for medical practice.	b & ja; av. Fac: staff & invited speakers 4x; 180s; M
c02	H Phase I Elective: Medicine in the Modern World. Ethical, historical, philosophical aspects of medicine.	b & ja; av. Fac: staff & invited speakers 5x; 8s

c03 H 501: Human Sexuality. Sexual problems arising in medical practice. Medical, ethical, & psychosocial aspects of normal & abnormal sexuality.
b & ja; av.
Fac: D Munn
offered monthly; 1s/month

c04 H 502: Death & Dying. Meaning of death, patient & physician reactions to death; patient interviews & instruction in care of dying patient.
b & ja; av.
Fac: staff
offered monthly; 3-4s/month

c05 H 503: Religious Thought & Psychiatric Theory.
b & ja
Fac: D Munn, R Moores
offered monthly; 2s/yr

c06 H 504: Religion & Medicine. Religious faith & practice as they relate to practitioner, patient, & delivery of health care in our society.
b & ja
Fac: staff
offered monthly; 4s/yr

c07 H 508: Ethical Issues in Medicine. Exploration of some of most significant & interesting problems arising out of practice of medicine using tools of ethical analysis.
b & ja; av.
Fac: R Martin
offered monthly

Future Plans: developing proposal for a Center for Biomedical Ethics in cooperation with area colleges, universities, & professional schools.

0790 OGLETHORPE COLLEGE
Atlanta, GA 30319

c01 BioSci. Correlates biological information with current problems of medicine, ecology, population, genetics, & their social & political implications.
Nicklanovich
Fac: staff
50s

0800 UNIVERSITY OF GEORGIA SCHOOL OF LAW
Athens, GA 30602

c01 Law 595: Environmental Law. Legal treatment of air, water, noise, & pesticide pollution--from viewpoint of defending polluter & regulating authority.
Barkley & Seckler; Reitze.
Fac: JW Futrell

c02 Law 595A: Environmental Law Seminar. Advanced problems in environmental policy.
b & ja
Fac: JW Futrell

0810 WEST GEORGIA COLLEGE
Carrollton, GA 30117

c01 EnvStud 100. — Fac: N Gingrich
Treats environmental topics in terms of scientific principles & human values.

c02 EnvStud 252: The Social Sciences & the Environment. — Fac: N Gingrich
Human perspectives of environmental quality; emphasis on history, sociology, politics, & economics of environmental control.

c03 Phil 301: History & Philosophy of Science. — Fac: D Higgins
Scientific method & its results in relation to culture & values.

HAWAII

0820 HAWAII COMMUNITY COLLEGE
Hilo, HI 96720

c01 NatSci 101: Man, Science, & Technology. — b
Problems & opportunities in use of sci. & tech., & their effects on man's behavior. — Fac: staff
8x; 50s; U

0830 UNIVERSITY OF HAWAII
Honolulu, HI 96822

p01 Hawaii Research Center for Futures Study

IDAHO

0840 THE COLLEGE OF IDAHO
Caldwell, ID 83605

p01 Human Ecology Dimension Program (HED)

c01 HED: Ecology & Ethics. — Fac: LM Stanford-Bio
RD Acheson-Bio
W Chalker-Phil
3x

c02 HED: Energy & Economics. — Fac: L Bollinger, J Willmorth
1x

c03 HED: Biology in Human Affairs. — Fac: P Packard, R Bratz,
R Acheson, L Stanford
9x

0850 UNIVERSITY OF IDAHO
Moscow, ID 83843

p01 Technology & Human Affairs (THA)

c01 Eng 394: Technology & Societal Decisions.
Engineering systems & how decisions regarding them are made in society.

ja; n.
Fac: DS Hoffman, ML Jackson
5x

c02 Eng 396: Society & Engineering Decisions.
Applies humanities & social sci. to engineering projects of public concern. Emphasis on political & other social aspects.

n
Fac: DS Hoffman, DF Haber
3x

Future Plans: development of joint program with PolSci & THA.

ILLINOIS

0860 CENTRAL YMCA COMMUNITY COLLEGE
Chicago, IL 60606

c01 NatSci 103: Environmental Problems.
Technical & ethical questions of preserving & improving human environment.

c02 NatSci 112: Human Concerns in Science.
Designed to promote intnl understanding & intercultural communication based on universality of sci. & tech.

0870 DE PAUL UNIVERSITY
Chicago, IL 60614

p01 Natural Science-Mathematics Division of General Education Program (NSM)
p02 Program II, Department of Physics (P)

Abbreviations: H = Honors Program

c01 NSM 110: The Computerized Society.
Impact of computers on society.

Gotlieb & Borodin
Fac: SM Goes-Math
faculty from Soc
3x; 35s

c02 NSM 301/P: Atmosphere & Oceans.
The air & oceans; ecology & pollution; political & economic implications.

b & ja
Fac: DO Van Ostenburg-Phys
9x; 45s

c03 NSM 302/P: Nuclear Energy &/or Society.
Technological & economic benefits & social costs of nuclear energy utilization.

Inglis
Fac: GP Lietz-Phys
EJ Schillinger-Phys
8x; 40s

c04	NSM 303: Problems in a Technological Society. Discussion of 1 or 2 problems, e.g., modern warfare & disarmament, pollution, population, etc.	SA (1973a); Littauer & Uphoff; UN. Fac: AA Blumberg-Chem TJ Murphy-Chem 10x; 45s
c05	NSM 304: Man & Systems: The New World of Cybernetics. Applications to ecology, automation, the economy, & technological change.	Wiener Fac: J Goldman-Math 2x; 35s
c06	NSM 307/P: Resources & Man. Exploration of material & energy resources, impact of shortages, & projections of the future.	NAS-NRC (1969a); Hammond, Metz, & Maugh; Ehrlich, Ehrlich, & Holdren. Fac: Z El Saffar-Phys JA Anaysas 2x; 35s
c07	NSM 309/P: Contemporary Physics & its Impact on Man. Description of selected techs.; tech. assessment & its impact upon public policy determination.	b & ja Fac: EJ Schillinger-Phys 4x; 35s
c08	P 240: History of Physical Science. Key theories of physics & their consequences to society, both materially & intellectually.	CJ Singer; b & ja. Fac: EJ Schillinger-Phys 4x; 20s
c09	H 205H: Basic Processes: Creativity. Analysis of creative acts in both art & sci. with discussion of conditions in which creativity flourishes.	A Baker; selected poems. Fac: EJ Schillinger-Phys FI Tietze-Engl 3x
c10	H 319H: Science & Religion--Creation in Scientific & Religious Perspective.	Fac: DO Van Ostenburg-Phys DR Althoff-RelStud guests from RelStud
c11	H 345H: Science & Ethics. Selected problems & ethical implications.	b & ja Fac: EJ Schillinger-Phys RC Thommes-Bio JW Keating-Phil 1x

Future Plans: continuing evolution of NSM & Honors Program.

0800 ELMHURST COLLEGE
Elmhurst, IL 60126

c01	Theol 332W: Ethical Issues in the Health Sciences.	Fac: Pankratz, Limpter

Colloquia/Lecture Series

1. Great Decisions 1975 (Seminars on Foreign Policy): for students over 22 years old. Arranger: F Tyrrell, Director of Evening Session & Extended Services.

0890 ILLINOIS BENEDICTINE COLLEGE
Lisle, IL 60532

c01	Phil 225: Biomedical Ethics.	ja Fac: P Fauser lx

0900 ILLINOIS INSTITUTE OF TECHNOLOGY
Chicago, IL 60616

p01 Education & Experience in Engineering Program (E^3)

c01	Hist/PolSci 339: The Impact of Nuclear Energy on Society. Impact of nuclear energy on American society from perspectives of history & political sci. Role of nuclear energy in society & economic & political implications.	Rosenberg; Leuchtenberg; NP Davis; Polenberg; Paterson; Grodzins & Rabinovitch; D Potter; McPhee; Bulletin of the Atomic Scientists. Fac: P De Forest-PolSci P Tyor-Hist
c02	Phys 220: Dawn of the Nuclear Age. Social & political background leading to development of nuclear & thermonuclear devices for military & domestic use.	Jungk; av. Fac: H Weinstock
c03	PolSci 252: Environmental Control. APEX-METRO simulation exercise to illustrate political & professional elements of ~~metropolitan environmental decisions.~~	Crenson Fac: P De Forest EnvEng
c04	PolSci 332: Science & Public Policy. Content varies. Spring 1975: exploration of connectives between political & professional roles & attitudes within community of physicists, ntl & intnl.	Gamow; Watson; Haberer; Nelkin (1971); Snow (1961); Lewis & Wilson; ja. Fac: PH De Forest
c05	Soc 401: Sociology of Science. Societal & cultural factors influencing emergence of western sci. & impact sci. has had on industrial society.	Kuhn; Restivo & Vanderpool; ja. Fac: T Taveggia & others

Colloquia/Lecture Series

1. Science & Society Seminar: weekly. For students, faculty, & staff of IIT Research Institute. Arranger: J Houck, Campus Chaplain.

2. E^3 Program "Theme Seminar": for students, faculty, & outside resource persons. The goal of the seminar is to define problem areas for the following year.

Future Plans: Science & Technology Studies Program in planning stages.

0910 KENDALL COLLEGE
Evanston, IL 60204

c01 Bio 111e: Biology & Society.	Ehrlich, Ehrlich, & Holdren; Goldsby; Kozlovsky; f. Fac: JA Wagner

0920 LOYOLA UNIVERSITY OF CHICAGO
Chicago, IL 60626

c01 Hist 338-339: Science, Technology & Society Since 1500.	Butterfield; Landes; Musson; Eiseley (1961); Medvedev; b. Fac: J Hays U, G
c02 Law 313: Environmental Law.	b & ja Fac: R Graham L
c03 NatSci 112: Man Adapting.	Wallace Fac: M Andre U
c04 NatSci 195: Development of Scientific Methods.	Butterfield; Hanson; b & ja. Fac: J Blachowicz-NatSci A Hayes-Phil J Hays-Hist U
c05 Phil 210e: Science, Technology, & Man.	Kearney; Plato; n.s.: Freud, Skinner, Marcuse, Teilhard, Galileo, Adam Smith; ja. Fac: J Blachowicz, K Parsons U
c06 Phil 257: Ethics & Medicine.	ja Fac: D Ozar, K Parsons U

Future Plans: constructing interdisciplinary undergraduate concentration in area of sci., tech., & society.

0930 NORTHEASTERN ILLINOIS UNIVERSITY
Chicago, IL 60625

c01 Chem 54-101: Chemistry, Man & the Environment. — b & ja
Emphasis on relationship of chemistry to creation & solution of environmental problems.

c02 Chem 54-104: Energy & the Environment. — b & ja
Introduction to chemistry & physics of energy producing processes & their social & environmental implications.

c03 EarthSci 53-204: Man & His Physical Environment. — b & ja
Geologic aspects of environment & man's impact on them.

c04 Phys 59-102: Science & Social Responsibility. — b & ja
Includes discussion of the argument for simplification, the readiness of man for present day tech.

c05 Phys 59-108: Technology & its Impact on Society. — b & ja
Recent advances in such fields as power generation, communications, & defense; political, social, & ecological ramifications of these developments.

0940 NORTHERN ILLINOIS UNIVERSITY
DeKalb, IL 60115

c01 Indust&Tech 294: Technology & Cultural Relevance. — Fabun; Dorf (1974b); Toffler (1970).
Fac: EA Jacobsen
invited speakers
Ix

0950 NORTHWESTERN UNIVERSITY
Evanston, IL 60201

Center for the Interdisciplinary Study of Science & Technology (CISST)
p01 Program of Research on the Management of Research & Development (POMRAD)

c01 Anthro 403-C71: Social & Cultural Dynamics. — b & ja
J, G
Dynamics of social & cultural evolution, including role of tech. & energy in providing materials base.

c02	Eng 703-C65: History of Engineering. Development of engineering from ancient times to 1930; emphasis on influence of man's techniques & achievements set against his environment & social order.	Fac: R Hartenberg
c03	IndustEng&MgmtSci: Seminar in the Organization & Management of Research & Development.	ja Fac: AH Rubenstein
c04	ID 401-C75: The Development of Science. Genesis, development, & continuity of leading ideas in physical & biological scis.	b & ja Fac: C Condit
c05	Journ 325-015: Science & Technology Seminar. Historical & philosophical approach to scis. to provide basic knowledge of scientific & technological problems & developments which journalist must interpret.	b & ja Fac: B Baldwin G
c06	Journ 325-D91-97: Reporting of Public Affairs. D95: Reporting of Science & Technology. Lab course in public affairs reporting in sci. & tech.	b & ja Fac: B Baldwin G
c07	Phil 439-B61: Medical Ethics. Legal & moral problems arising in medical research & practice.	Fac: JB Moore U
c08	Phil 439-C55: Scientific Method in Social Sciences. Philosophical bases of sci. with particular reference to social phenomena.	Fac: E Harris
c09	Phil 439-C67: Technological Values. Study of values intrinsic to tech.; examination of possibility of making tech. serve human ends.	Fac: S Todes
c10	PolSci 449-C23: Government, Economics & Environmental Planning. Political problems connected with the changing human habitat.	Fac: H Friesema U, G

Colloquia/Lecture Series

1. Friday Noon Discussion on the History & Philosophy of Science: for interested faculty & advanced graduate students. Arranger: D Moyer, CISST.

R3

2. Seminars on the interdisciplinary Study of Science & Technology: for interested faculty & students. Arranger: M Radnor & B Collins, CISST.

Future Plans: possible development of a social sci./humanities program for sci. majors.

0960 NORTHWESTERN UNIVERSITY MEDICAL SCHOOL
Chicago, IL 60611

c01	Health Care in the Urban Setting. Social, economic, political factors in urban health care.	b & ja Fac: J Stamler
c02	Medical Ethics. Key current problems.	HCB Fac: H Visotsky
c03	Biology, Behavior, & Social Organization.	Monod; Ardrey. Fac: O Hechter

0970 PRINCIPIA COLLEGE
Elsah, IL 62028

c01	Interdisciplinary Field Study. 10-week field study of telecommunications policy in Washington, DC. Part-time work in governmental agencies or private corporations & seminar about governmental functions & interrelationships among agencies.	25s; U

0980 ROOSEVELT UNIVERSITY
Chicago, IL 60605

c01	Geog: Ecology or Society: Introductory Course to Environmental Studies.	Fac: F Corrado U
c02	Geog/PubAd: Administration of Environmental Protection Programs, Business & Governmental Responsibilities.	Fac: F Corrado G
c03	PhysSci 310: The Future of Science. Financing, allocation of funds, education & communication.	Goran (1971; 1974); b & ja. Fac: M Goran 5x; 15s; U
c04	PhysSci 311: The Past of Western Science. Development of sci. & interaction with the cultural climate.	Mason; b & ja. Fac: M Goran 10x; 10s; U
c05	PhysSci 330: Energy & the Future.	Hammond, Metz, & Maugh; SD Freeman. Fac: M Goran 10s

c06	Soc: Community Organization: the Role of Community in Modern Science. Impact of development of sci. & tech. on society in general & community structures specifically.	Greer; Stein; Nisbet; Bronowski (1961); Mumford (1961). Fac: D Reitzes U

Future Plans: Urban Studies Institute, funded under Ford Foundation Venture Grant, will offer following programs: (1) community research--nature & formations of community areas in Chicago. One aspect of this research will be impact of sci. & tech. on community structure. (2) Metro-Apex Simulation Game for faculty & public & private agency personnel. This simulation deals with impact of tech. on community structure.

0990 SANGAMON STATE UNIVERSITY
Springfield, IL 62708

Environments & People Program (ENP)

c01	ENP: Ecosystems, Value Systems, Social Systems.	
c02	ENP: Environmental Politics.	
c03	ENP: Heredity, Evolution, & Society.	
c04	ENP: Environmental Defense Through Legislative Action.	
c05	Phil 431: Philosophy of Science. Includes consideration of moral obligations of scientists; use & abuse of sci. in policy decisions.	Campbell; Kuhn; Toulmin; Polanyi (1964). Fac: GM Schurr
c06	Phil 451: Technology & Human Values. Nature of tech. & impact on society. Interpretations of tech. by major 20th C authors.	Kuhns; Titmuss. Fac: GM Schurr, L Shiner 2x
c07	PubAffrsColloquium: New Medicine vs. Old Morals.	b & ja Fac: GM Schurr 2x

1000 SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE
Edwardsville, IL 62025

c01	GTS 260: Global Problems & Human Survival.	Boulding; L Brown (1972b). Fac: R Parker, R Hashimi, R Glossop ID 1x; U

c02	GIS 300: Sociocultural Problems of Technology. Historical evolution of tech., sources of technological development, human problems related to development & use of tech.	Fac: J Brown, C Frisbee, R Lauer ID Ix; U
c03	GIS 340: Problems of War & Peace.	Stagner; Beltz & Herman. Fac: staff ID: Schools of SocScl & Hum U
c04	GSM 231: Human Heredity & Society. Genetic aspects of contemporary biological social problems.	Lerner (2) Fac: P Nair BioScl Ix; 30s
c05	GSM 232: Plants & Civilization. Examination of role of plants in man's social & economic history; role of man in modification & distribution of plants.	E Anderson; H Baker. Fac: R Keating BioScl 2x; 30s; U
c06	GSM 250: Technology & Society. Impact of tech. on social structure; ethical &/or moral aspects; history of tech. in relation to social development; assessment & forecasting.	Teich Fac: J Brown Eng 13x; 100s; U
c07	GSM 300: The Energy Crisis & Environment. Problems & prospects of meeting ntl & worldwide energy demands.	Hammond, Metz, & Maugh; S (4/19/74). Fac: S Sanders Phys 30s; U
c08	GSM 322: Radiation & Life. Types, sources, uses of radiation; effects on biological systems; impact of use on society.	RCA Fac: A Wilbraham Chem 20s; U
c09	GSM 350: Concepts of Technology. General concepts for application to problems in fields such as business, economics, politics, social study, & individual activities.	ECCP (1973) Fac: L Jones Eng 15s; U
c10	GSM 383: Nature & Impact of Physical Science. Nature & importance for individuals & society.	Natenson; Madden. Fac: staff PhilStud 30s
c11	OUST 201-2-3: The Man-Made World--A Foundation Course in Technology. Interaction of sci. & tech. with society & environment.	OU materials Fac: L Walford Phys 45s

c12 OUST 251-2-3: Foundation Course in Science.	OU materials Fac: L Walford Phys U

1010 SOUTHERN ILLINOIS UNIVERSITY MEDICAL SCHOOL
Springfield, IL 62708

p01 Medical Education, Society, & the Humanities (MESH)

c01 MESH: Medical Ethics. Clinically based seminars on ethical problems as encountered in physician's practice.	b & ja Fac: R Dayringer, G Davidson invited speakers
c02 MESH: Medical Jurisprudence. Seminar on law & medicine.	b & ja Fac: B Miller, T LeBlang
c03 MESH: Culture & Medicine. Seminar on evolution of medicine in cultural context.	b & ja; av. Fac: G Davidson, E Pearson

Colloquia/Lecture Series

1. Medical Humanities Lecture Series (MESH): for students, faculty, interested public. Arranger: G Davidson.

1020 UNIVERSITY OF CHICAGO
Chicago, IL 60637

p01 Conceptual Foundations of Science (CFS)
History of Science & Medicine

Abbreviations: ST = Committee on Social Thought

c01 CFS 326: Seminar: Science in Society.	Ravetz; b & ja. Fac: W Wimsatt
c02 BioSci 210: Biological & Ethical Aspects of Control of Reproduction.	Volpe (1971); Jones & Bodmer; b & ja. Fac: J Gustafson, A Ravin
c03 Genet 395: Genetics & Society.	Fac: B Strauss
c04 MedBio: Social & Ethical Issues in Medicine.	b & ja Fac: J Gustafson, C Kimball, P Tighe
c05 ST 397: Sociology of Science.	Ben-David; b & ja. Fac: S Toulmin, J Ben-David

Future Plans: Liberal Arts of Biology & Medicine--human biology & medicine as social enterprises. This would be a component part of a new program in human biology & preclinical medicine, as well as a provider of courses for other students interested in specific aspects of the field.

1030 UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE
Chicago, IL 60690

Abbreviations: UH = University Honors Program

c01 Bio 106: Biology in Human Affairs. — Fac: staff

c02 CC 299 (UH): Science & Society. — ja
Fac: C Matthews-Chem

c03 CC 299 (UH): The National Energy Problem. — Fac: J Hartnett-EnergyEng

c04 CC 299 (UH): Contemporary Topics.

c05 EnergyEng 293: Man & Technology. — Fac: D Hacker

c06 PolSci: Science, Technology, & Public Policy. — Engler; Holdren & Herrera; W Anderson; L Brown (1972a); Roos.
Fac: B Keenan

c07 PolSci: The Public Administration of Science & Technology. — Engler; ja.
Fac: B Keenan
Response of public systems to scientific & technological revolution.

c08 PolSci: Environmental Politics. — Smith, Steck, & Surette; Rosenbaum; Paulsen & Denhardt; ja.
Fac: LM Wenner
Policy formulation, implementation, & impact on physical environment.

c09 PolSci: Seminar in Environmental Policy. — Fac: LM Wenner
G

1040 UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN
Urbana, IL 61801

p01 Institute of Communications Research
p02 Sloan Foundation Program

c01 Ag/HomeEc 192: Honors Seminar: Science, Food, & World Population.
Application of sci. to biological problems of survival. Relation between sci., its techniques, & feeding of world populations.

c02	Aero&AstroEng 199: Energy Alternatives & Societal Values: Technology Assessment for Non-Engineers. Alternative technological & non-technological solutions to energy crisis; aesthetic, environmental, & human consequences of each.	ja Fac: CE Bond
c03	Arch 288: Man & Environment. Emphasis on need for planning for design for professional & citizen participation in shaping communities; in context of exploding demands on land of an expanding, affluent, technologically advanced society.	
c04	Bio 100: Biological Science I. Introduction to philosophical & social issues to which biology can provide insight.	ja Fac: GH Kieffer 12x; 900s
c05	Bio 101: Biological Science II. Continuation of 100; increased emphasis on issues with special consideration of implications of modern biology.	ja Fac: GH Kieffer 700s
c06	Bio 380: Biology, Society, & Ethics. Biomedical, genetic, population, environmental, codes of professional ethics.	RH Williams; Blackstone; r. Fac: GH Kieffer
c07	Econ 199: Technology, Economics & History. History of tech.; social & economic implications of tech. Relationship of tech., economic processes, society, & human values.	Kranzberg & Davenport; White (1962); Habakkuk. Fac: Uselding
c08	EngHonors 196: The Engineer & Society.	
c09	EnvStud/AgEng/CivEng/GenlEng/Geog/MechEng/UrbPlng/VetMedSci 348: Air Pollution Seminar. Health effects, economic damage, & political, legal, urban planning, & engineering implications of air pollution as related to control & enforcement.	Fac: W Lowry Sr, G
c10	Hist 348: Technology in American Life. Sources of technological innovation; impact of tech. on economy, culture, & thought of America.	
c11	Hist 349: The Scientific Revolution, 1543-1727. Intellectual & social factors involved in emergence of sci. in late 16th & 17th C.	

c12 Hist 368/Phil 318: Scientific Thought II.
Historical & critical survey of development of sci. & its philosophical interpretation from death of Newton to early 20th C.

c13 Hist 371/RelStud 381: American Thought & Culture I.
Impact of fundamental ideas in shaping American culture, character, & institutions from colonial times to mid 19th C. Interplay between religious, scientific, political, social, & artistic thought.

c14 Hist 372/RelStud 382: American Thought & Culture II.
Mid 19th C to present. Role of Darwinism & naturalistic thought, political, cultural, religious, & intellectual forces & their interrelations; impact of sci. & tech.

c15 MiningEng 302: Political, Economic, & Environmental Aspects of Minerals & Their Utilization.
Availability & utilization of ntl & world mineral resources & related environmental, economic, & political implications.
Fac: D Lieberman

c16 Phil 317: Scientific Thought I.
Historical & critical survey of development of sci. & its philosophical interpretation to death of Newton.

c17 PolSci 357: Law & Politics of Environmental Protection.
Court cases, legislation, & social sci. materials dealing with air, water, & noise pollution & conservation. Emphasis on political factors involved.

Colloquia/Lecture Series

1. Thursday Night at the Lab (Social Impact of Chemistry): Arranger: KL Rinehart, Chem.
2. Alcoa Foundation--Energy Systems: Arranger: M Van Valkenburg, ElecEng.

1050 UNIVERSITY OF ILLINOIS COLLEGE OF LAW
Champaign, IL 61820

c01 Law 363: Environmental Law.
Regulatory aspects of environmental law; areas of government control; environmental impact statements.
Environmental Law Institute; Hanks, Tarlock, & Hanks; ja.
Fac: R Findley
2x; 75s

c02	Law 371: Metro-APEX. Gaming simulation: law, administration, tech., & politics of pollution control & urban land use regulation.	Metro-APEX computer program & handbooks Fac: S Plager, J Stukel CivEng 5x; 60s; U, G, L
c03	Law: Natural Resources. Problems in use of water, air, & land resources.	Meyers & Tarlock (2) Fac: Findley
c04	Law: Law & Psychiatry.	Brooks Fac: Reisner

1060 WHEATON COLLEGE
Wheaton, IL 60187

c01	Bio 13: Contemporary Issues in Biology.	Curtis; GR Taylor. Fac: J Arnold
c02	Chem: Chemistry & Society.	Kieffer Fac: N Brace
c03	Sci 57: Science & Culture. History of scientific ideas in relation to world views & cultural interactions.	Barbour (1966); Roszak; Emmet. Fac: J Spradley

---

INDIANA

1070 INDIANA UNIVERSITY
Bloomington, IN 47401

p01 Advanced Studies in Science, Technology, & Public Policy (AS)
p02 Citizen & Science Project--The Poynter Center (PC)

Abbreviations: HPS = Department of History & Philosophy of Science
PEA = School of Public & Environmental Affairs
SS = Sociology of Science--Sociology Department

c01	Y 665/V 550: Science, Technology, & Public Policy I.	b & ja PolSci, PEA, AS
c02	Y 765/V 550: Science, Technology, & Public Policy II.	b & ja PolSci, PEA, AS
c03	X 397: The Citizen & Science. Institution of sci. & its interaction with other American institutions in attempt to provide base of knowledge from which citizen can make informed decisions on sci.-based public issues.	b & ja PC U

c04	V 170 (PEA): Public & Environmental Affairs.	
c05	V 262 (PEA): Environment: Problems & Prospects.	
c06	V 503 (PEA): Public Affairs & the Environment.	
c07	V 515 (PEA): Technology Assessment.	
c08	V 534 (PEA): Urban Technology.	
c09	X 102 (HPS): Mankind & Nature in Western Civilization. Major features of human species' confrontation with nature; six episodes from ancient Greece to 20th C.	Finley; White (1962); Westfall; Becker; Bernal (1953); Klaw. Fac: RS Westfall
c10	X 200 (HPS): Introduction to Scientific Reasoning. Principles of scientific reasoning & decision making presented in form useful to scientists & nonscientists for evaluating scientific issues of current personal or public concern.	Diehl; Goode; Meadows, et al.; Pauling; Salmon; von Daniken. Fac: RN Giere
c11	X 210 (HPS): Technology & Western Civilization. Agriculture, warfare, & industry from primitive to modern times.	Childe; Derry & Williams. Fac: VE Thoren
c12	X 301 (HPS): Growth of Scientific Establishment. Development of modern scientific community from origin to 20th C. Special attention to ever-increasing involvement of sci. in industrial, medical, & military tech.	Bernal (1953); Daniels; Merton; Weinberg.
c13	Honors 300/X 455 (HPS): Seminar: Science, Technology & Human Values. Analysis of current belief that there is fundamental opposition between scientific view of world combined with high tech. & the human values that would define a good society.	Mitcham & Mackey; Skinner (1971); Ellul (1964). Fac: RN Giere
c14	Y 392 (PolSci): Problems in Contemporary Political Philosophy.	
c15	SS: Social Problems & Policy: Science & Technology.	Ravetz; Schooler. Fac: Mullins 30s

Colloquia/Lecture Series

1. AS has held a series of colloquia each year on sci. & sci.-related topics. They are for faculty & students, & are arranged by program staff.

1080 INDIANA UNIVERSITY SCHOOL OF LAW
Bloomington, IN 47401

c01	Law: Law & Technology.	b & ja Fac: J Brodley
c02	Law: Natural Resources Law. Exploitation & use of oil, gas, & other natural resources; emphasis on water use, planning & regulation, & energy policy.	Williams, Maxwell, & Meyers Fac: AD Tarlock
c03	Law: Environmental Law. Procedural & substantive responses of legal system to conflicts between private contestants & between private contestants & governmental agencies. Public policy analysis.	b & ja Fac: White
c04	Law: Law & Biology. Law's response to rapid social & scientific change.	b & ja Fac: R Dworkin

1090 PURDUE UNIVERSITY
Fort Wayne, IN 46805

c01	CompSci 201: Computers & Society. Computer applications which affect everyday life. Impact of computers on society.	Rothman & Mosmann; Sack & Meadows. Fac: KL Modesitt-Math
c02	Engl 396: . Society, Science & Technology. Analysis of contemporary & future America as scientific & technological civilization.	Boulding; Bronowski (1956); Burke; Orwell (1971); Skinner (1948); Toffler (1970). Fac: S Hollander

1100 PURDUE UNIVERSITY
West Lafayette, IN 47907

p01 Curriculum in Science & Culture
Lilly Visiting Professorship in Science, Theology & Human Values (LVP)
p02 Program on Science, Technology, & Public Policy (STPP)

Abbreviations: MS = Man Series (program terminated)

c01	Phil 493M/Sci 490M: The Interaction of Science & Religion. Influence on world views since 16th C. Ethical issues concerning modern tech.	r; b. Fac: I Barbour (Fall 73) LVP
c02	Phil 580: Ethical Issues in Engineering & Science. Role of scientists & engineers in decisions involving social consequences of sci. in environment, genetics, computers, etc.	r; b. Fac: I Barbour (Fall 73) LVP
c03	Phil 493T: Technology, Religion, & Human Values. Attitudes toward nature & tech. in western religious thought, past & present.	r; b. Fac: I Barbour (Spring 74) LVP
c04	Phil 493S: Science & Religious World Models. Impact of sci. on religion & alternative of sci. as religion.	r; b. Fac: F Ferre (Fall 74) LVP
c05	Phil 580: Technology & Human Values.	r; b. Fac: F Ferre (Fall 74) LVP
c06	Phil 493F/Chem 597E: Engineering, Ethics & the Future. What is needed to survive probable future, in terms of new values & techs.	r; b. Fac: F Ferre (Spring 75) LVP
c07	Phil 493T/Sci 490M: World Models for the Future. On what should we base our lives in uncertain future: total tech., magic & occult, Christianity. Possible religious responses to unknown post-modern world.	r; b. Fac: F Ferre (Spring 75) LVP
c08	Phil 580: Structural, Legal & Ethical Considerations in Environmental Policy.	Fac: EL Long (Fall 75) LVP
c09	Phil 493S/Sci 490M: Human Situation & Human Prospects.	Fac: EL Long (Fall 75) LVP
c10	PolSci 321: Science & Government. Scientific community, government structure, process for sci. policy making; impact on scientific enterprise.	b & ja Fac: staff STPP 2x; 35s; U
c11	PolSci 322: Science, Technology & World Politics. Impact of scientific & technological revolution on world politics.	b & ja Fac: Galey STPP

c12	PolSci 429A: American Public Policies. Issues in American policy making, including decision making in technologically complex policy arenas	b Fac: Johnson-Nicholson STPP 25s
c13	PolSci 521: Science, Technology, & Public Policy. Institutional & value relationships of sci., tech., & public policy.	b & ja; Salomon; Haberer; DK Price. Fac: J Haberer STPP 30s; U, G
c14	PolSci 523: Environmental Politics & Public Policy.	b & ja; f. Fac: staff STPP 40s; U, G
c15	PolSci 525: The Professions & Public Policy. Medicine, engineering, sci., & agriculture: internal & external politics, involvement in public policy, role & impact of governments, social & professional responsibility.	b & ja Fac: Friedman, Haberer STPP 15s; U, G
c16	PolSci 526: Science & the City. Scientific-technological approaches & solutions to urban problems. Interfaces between federal, state, & local policy making systems.	b & ja Fac: Friedman STPP 20s; U, G
c17	PolSci 621: Proseminar in Science, Technology & Politics. Emphasis on the literature.	Fac: staff STPP 15s; G
c18	PolSci 622: Research Seminar on Science & Public Policy. Topics vary.	Fac: staff STPP 15s; G
c19	PolSci 635: Research Seminar on Science & World Politics. Impact of sci. & tech. upon genesis, evolution, behavior, & norms of intnl system. Emphasis on ocean policy & law of sea.	Skolnikoff (1972); Gullion; Johnston; Kash, et al. Fac: Galey STPP
c20	A&D 490A/CivEng 5971: Man, Aesthetics, & Public Works. Discussion of man-made structures which are not considered architecture but which are made for practical use, often without aesthetic consideration: bridges, dams, watertowers, gas tanks, silos, super highways.	r; b. Fac: A Giorgini-CivEng J Bennet Olson-Bio AM Vevers-CreativeArts MS 2x; 17s

c21	AdminSci 490C/MechEng 497I: Technology & Values. Impact of sci. & tech. on emerging personal & societal value systems; development of practical means by which values may guide future technological considerations.	r; b. Fac: NM Laurendeau-MechEng FR Incropera-MechEng AR Spalding-MechEng MS 2x; 18s
c22	Aero&AstroEng 590U/IndustMgmt 490T: Man & Transportation. Case oriented. Socio/political/economic/technical aspects of transportation problems.	r; b. Fac: JW Drake-Aero&Astro WR Eberle-Aero&Astro DC Whybark-IndustMgmt MW Pustay-IndustMgmt MA Drake-Library/A-V Ctr MS 1x; 12s
c23	AgEng/AnSci 250/Anthro 592/Chem 597A: Man & His Food. Relationships of man, his culture, & environment bearing on production & distribution of adequate, healthful food supply for present & future world populations.	r; b. Fac: WJ Stadelman-AnSci LF Albright-ChemEng M Glazer-Anthro/Soc MS 1x; 143s
c24	CivEng 587B/Econ 490E/Phil 493E/PolSci 493E: Man & the Environment: an Interdisciplinary Assessment. Environmental crisis in US from perspectives of ethics, politics, economics, & engineering.	r; b. Fac: KM Friedman-PolSci I Barbour-Phil GR Hueckel-Econ AJ Steffen-CivEng MS 4x; 70s
c25	Econ 490A/Hist 493A/PolSci 493A/MechEng 497A: Man & Energy.	r; b. Fac: AR Spalding-MechEng LF Albright-ChemEng KC Brown-Econ VL Foley-Hist J Haberer-PolSci PN Powers-NuclEng MS 1x; 36s
c26	Econ 490E/Hist 493E/MechEng 497F: Man as Engineer in History. Development of engineering theory & practice & role of engineer in society.	r; b. Fac: GR Hueckel-Econ VL Foley-Hist W Soedel-MechEng MS 2x; 30s
c27	IndustEng 590M/Hist 493M/PolSci 493M/Soc 493M: Man & Health Care. Contributions of basic scis. & engineering to medical progress; social, economic, & political aspects of health care.	r; b. Fac: JR Anderson-Soc KM Friedman-PolSci LN Magner-Hist SD Roberts-IndustEng A Hindle-IndustEng MS 2x; 40s

c28	Anthro 576: Impact of Western Technology Upon the Nonwestern World. Social & cultural changes that have stemmed from introduction of western tech. & economic organization into nonwestern world.	Fac: M Glazer
c29	Comm 553: Science Writing. Techniques of interpreting sci. to general public.	b & ja; r. Fac: LE Trachtman
c30	GS 260: Underclass Seminar in Science & Society. Seminar for majors in curriculum in sci. & culture.	b & ja Fac: Trachtman, Haberer, Sosensky, Giese, Hirsch, Pearlman, et.al.
c31	GS 460: Senior Seminar in Science & Society. Seminar in special problems of sci. & society.	b & ja Fac: Trachtman, Haberer, Sosensky, Giese, Hirsch, Pearlman, et.al.
c32	Hist 333: Science & Technology in Western Civilization I. Dawn of civilization to Newton. Sci., tech., & the societies which encourage or abridge them.	Clagett; Farrington; White (1962); de Camp. Fac: VL Foley
c33	Hist 334: Science & Technology in Western Civilization II. Emphasis on relation between achievements of individual investigators & major aspects of society & culture in which they lived.	Mason; Eiseley (1961); Asimov; Cardwell (1972). Fac: VL Foley
c34	Hist 433: Medicine & Magic: A History of the Health Sciences. Emphasis on wide variations in historical & cultural definitions of health & disease related to the social & cultural factors affecting value placed on health & medical treatment.	b & ja Fac: LN Magner
c35	Hist 494: Science & Technology in American Civilization. Characteristics of developments in US in contrast to Europe; influence of sci. & tech. on American thought, society, & material culture.	Van Tassel & Hall; Hindle; Struik. Fac: VL Foley
c36	Hist 496: The History of the Life Sciences. Major revolutions in scientific thought & impact on society, as well as their critical reception in scientific, intellectual, & religious circles.	b & ja Fac: LN Magner

c37	Hist 516: The Scientific Revolutions in the Physical & Mathematical Sciences. Greek achievements, Newtonian synthesis, some advances of 19th & 20th C. Modes of scientific advance & interaction with social currents.	b & ja Fac: VL Foley
c38	Phil 552: Philosophy of the Social Sciences. Nature of concepts in the social scis. & ways in which they have been employed.	b & ja Fac: I Sosensky
c39	Soc 519: Sociology of Science & Technology. Social roots of modern sci. & tech.; social constraints & scientific autonomy; sci. as cultural value; impact of sci. & tech. on social institutions.	Barber & Hirsch; Hirsch; b & ja. Fac: W Hirsch

Colloquia/Lecture Series

1. STPP Tuesday Lunch: for interdisciplinary faculty, students, & public. Arranger: J Haberer.

1110 ROSE-HULMAN INSTITUTE OF TECHNOLOGY
Terre Haute, IN 47803

p01 Center for Technology Assessment & Policy Studies

c01	MechEng 414: Technology Assessment. 5 week assessment project.	b & ja; de Nevers. Fac: AT Roper, IP Hooper
c02	Multi-Institutional Program in Technology Assessment. 10 week assessment project.	Fac: AT Roper-MechEng R Cole-IndianaStateU R Grey-DePaulU TF Siddiqi-IndianaU

1120 ST MEINRAD COLLEGE
St. Meinrad, IN 47577

c01	ID 409: Interdisciplinary Seminar on Human Values in a Technological Age. Investigation of contemporary tech-based culture in terms of its implications for human values.	b & ja Fac: G Barnes
c02	Phil 405: Philosophy of Science I.	b & ja Fac: G Ring
c03	Phil 406: Philosophy of Science II.	b & ja Fac: G Ring

c04 Rel 209: Science, Technology, & Religion. Barbour (1966)
Nature & tech. from Christian standpoint. Fac: D Kahle

1130 WABASH COLLEGE
Crawfordsville, IN 47933

c01 Bio: Man & the Environment. b; f.
Interactions between economic, legal, sociological, & scientific areas. Fac: WN Doemel

IOWA

1140 CENTRAL COLLEGE
Pella, IA 50219

c01 Bible: Technology, Ethics, & Religion. b
Fac: J Van Hoeven

c02 Chem 200: Nature of Science I. p
Development of sci. in western European society & interrelatedness of sci. with non-scientific aspects of our culture. Fac: D Crichton

c03 Chem 201: Nature of Science II. p
Fac: D Crichton

c04 PolSci: Managing Earth. Beres & Targ
Fac: W Julian

Future Plans: developing a program, probably to be entitled "Science, Society, & Technology."

1150 DES MOINES AREA COMMUNITY COLLEGE
Ankeny, IA 50010

c01 Phys 110: Man & Energy. Fac: F Trumpy
Overview of impact of energy use on mankind & his environment.

1160 DRAKE UNIVERSITY
Des Moines, IA 50311

c01 Bio 146: Environmental Techniques. Fac: PJ Kingsbury
Measurement of the environment. Pollution limiting laws, environmental impact policy.

c02 Chem 31-32: Chemical Perspectives in a Changing Society. — Fac: JG Lindberg, LE Brown
Interplay of tech. with social values, political actions, & economics.

c03 PhysSci 52: Technology of Communication. — Davidovits
Development & functioning of a tech. which has been one of most influential in shaping society. — Fac: HL Downing
80s

Future Plans: multidisciplinary programs in environmental education being planned; multidisciplinary program in the future being discussed.

1170 GRINNELL COLLEGE
Grinnell, IA 50112

c01 Hum 244: Age of Scientific Revolution. — b
Scientific, literary, & political aspects related in 18th C Europe. — Fac: Clotfelter-Phys
Connelly-Engl
Parslow-French
Smith-Hist
2x

1180 IOWA STATE UNIVERSITY
Ames, IA 50010

p01 Program on History of Science & Technology (HST)
p02 Program on Technology & Social Change in Foreign Cultures (TSCFC)

Abbreviations: ES = Program on Environmental Studies

c01 Hist 230-231: Introduction to the History of Science & Technology. — Fac: DB Wilson
HST
Interrelationship between sci. & tech. & the times.

c02 Hist 271-272: Physics, History, & Society. — Fac: HI Sharlin, R Leacock
HST, Phys

c03 Hist 334A-334B: History of Technology & Engineering. — Fac: DB Wilson
HST, MechEng

c04 Hist 430A-430B-430C: History of Science. — Fac: HI Sharlin
HST, MechEng

c05 Hist 434: History of American Technology. — Fac: DB Wilson
Colonial times to present. — HST, MechEng

c06	Hist 591A-591B-591C: Seminar in the History of Science & Technology.	Fac: HI Sharlin, H Cravens, DB Wilson
c07	UnivStud 501X: Technology & Social Change in Foreign Cultures. Transfer of tech. & its social impact.	b & ja Fac: staff (6) TSCFC 28s
c08	UnivStud 501X: Technology & Social Change in East Asia. Post WWII societies & problems.	Chai & Chai; Teng & Fairbank; Befu; Ishida; ja. Fac: historian, sociologist, engineer TSCFC 18s
c09	UnivStud 530: Technology & Social Change in Foreign Cultures. Confrontation between modern tech. & traditional societies. Tech. as instrument of social change.	Hetzler; Foster; Moore (1965); b & ja. Fac: engineer, philosopher, sociologist TSCFC 10s
c10	UnivStud 590F: Special Problems in Technology & Social Change in Foreign Cultures.	Fac: staff TSCFC
c11	UnivStud 630: Seminar: Technology Transfer; Issues & Problems.	Fac: interdisciplinary team TSCFC
c12	UnivStud 420X: Workshop in Environmental Impact Analysis. Task force approach.	b & ja Fac: J O'Toole, C Davis ES
c13	Hist/Mech Eng 435: Science in American Society.	Fac: H Cravens
c14	Hist 436Ax-436Bx: Science & Religion in the West.	Fac: DB Wilson
c15	Hist/MechEng 562: Technology & Modernization.	Fac: DB Wilson
c16	Phil 231: Ethics. Issues in sci., tech., & human values.	Fac: R Hollinger
c17	Phil 380: Philosophy of Natural Science. Relationship between scientific activity & human values.	Fac: staff
c18	Sci&Hum 230-231: Cross Cultural Exploration I & II. Impact of environment & cultural factors on development of individual in foreign societies. Facets of cultures common to life.	Fac: team-taught Ix

Colloquia/Lecture Series

1. TSCFC Seminar Series: for faculty, graduate students, community. Topics vary each semester.

Future Plans: Interdepartmental Graduate Minor on Technology & Social Change (starting Fall 1975).

1190 LUTHER COLLEGE
Decorah, IA 52101

c01 FreshmanStud 11-12: An Introduction to the Liberal Arts & Sciences. Relationship of man to nature, self, & society. — Fac: staff from all divisions ✓ 12s

c02 Hist 74: History of Technology. Changes in tech. & effects on society. — Fac: J Hippen

1200 ST AMBROSE COLLEGE
Davenport, IA 52803

c01 Econ/PolSci/Phys: Energy & the Future.

c02 Phil/Bio/Theol: Bio-ethics.

c03 Phys/Math/Phil: Philosophy of Science.

1210 THE UNIVERSITY OF IOWA
Iowa City, IA 52242

Abbreviations: ELT = European Literature & Thought

c01 ELT 33.152: Values in the Contemporary World. Modern problems in definition & choice of values. — b Rel, Phys

c02 ELT 33.154: Human Nature & the Impact of Science. Relationship of scientific to social & humanistic thought. — German, ChemEng

1220 UNIVERSITY OF IOWA SCHOOL OF MEDICINE
Iowa City, IA 52242

c01 Behavior, Law, & Ethics. Discusses variables in medicine--physician, law, informed consent, death & dying. — Fac: CF Johnson

KANSAS

1230 KANSAS STATE UNIVERSITY
Manhattan, KS 66506

c01 GenlEng: Impact of Engineering Technology on Society. Complexities & interrelationships at the root of today's struggle with population, energy, ecology, resource distribution, etc.
p; f; av.
Fac: EE Haft-ElecEng
DA Nesmith-MechEng

c02 Hist 719: Science in America. Survey of American sci. from colonial era to present; emphasis on role of institutions & federal government.
b & ja
Fac: LE Page
1x; 8s; Ucl, G

Colloquia/Lecture Series

1. Public Information Seminars on Energy: for general public. Arranger: ND Eckhoff, JK Shultis.

1240 KANSAS WESLEYAN
Salina, KS 67401

Major in Survival Studies

c01 Bio 120: Man & the Environment. Nature, causes, possible solutions of environmental crisis.
Ehrlich & Ehrlich; Meadows, et al.; Hardin.
Fac: A Neuburger
4x; 50s

c02 Bio 135: Environmental Assessment.
b & ja
Fac: L Owen
3x; 30s

c03 ID 470: Quality of Life Seminar. Environmental concerns in Christian perspective.
60s

c04 Math 110: The Computer & Society. Effect of computers on social & political functionings.
b
Fac: K Carmen
3x; 15s

c05 RelStud 210: Ecology & Personal Life Style. Ethics of land use.
Faramelli; Harriss.
Fac: W Montgomery
2x; 45s

c06 Soc/Bio: Futuristics: Social Implications of Biological Research.
f; b.
Fac: G Taylor-Soc
A Neuburger-Bio
1x; 13s

Colloquia/Lecture Series

1. "The Village Green" Lecture Series: to complement Quality of Life Seminars. 4x/semester. For faculty, students, public. Arranger: O Voth. Guest speakers.
2. Kansas Wesleyan/Kansas Technical Institute Colloquia: emphasis on tech. & society. Monthly. For faculty. Arranger: L Schweder.

1250 SAINT MARY COLLEGE
Leavenworth, KS 66048

Abbreviations: J = courses offered in January term of 4 weeks

c01 Bio (J): Ecology & Man.

c02 Bio (J): Ecological Problems.

c03 Bio/Theol (J): Bioethics.

c04 Bio/Soc (J): Human Ecology.

c05 Bio 185: Biology Seminar.
Often concerns problems of sci. & society.

1260 UNIVERSITY OF KANSAS
Lawrence, KS 66045

c01	Bio 148: Introduction to Environmental Studies. Interactions within environment & man's role in these interactions. Present problems & directions for future.	Jackson; Southwick. Fac: R Perkins EnvStud 130s
c02	Bio 324: Genetics & the Future of Man. New advances in genetics & reproductive biology & impact on society.	ja; f. Fac: HG Wolfe 1x; 25-50s
c03	Bio 328: Biology & Society. Social problems from biological view.	Commoner; Chase; RJ Williams; Boston Women's Health Collective. Fac: M Maher 1x; 60s
c04	Bio 332: Environmental Law. Use of law to combat environmental problems & to conserve natural resources.	ja Fac: staff EnvStud 30s

c05 CivEng 750: Water Resources Policy & Administration.
Socio-political, economic, & engineering significance of institutional arrangements affecting American water resources policy.

c06 DesignEng 815: Technology & Society I.
Influence of political sci., human relations, law, humanities, & fine arts on development & utilization of human & natural resources.

c07 DesignEng 916: Technology & Society II.
Continuation of 815.

c08 Geog 333: Environment & Man.
Human-environmental problems/relationships.
Fac: W Kollmorgen
85s

c09 Hist 648: Materials, Technology & Cultural Change.
Development & application of materials from classical antiquity to early 19th C.
Fac: T Lewin

c10 Hist/DesignEng 304: Technology: Its Past & Its Future.
Role of tech. & its influence on society. Historical development traced with emphasis on relations to humanities.
p
Fac: J Stannard, J Maloney
4x; 45s

c11 Hist&PhilofSci/DesignEng 602: Technology Assessment.
Fac: A Breipohl

c12 Hist&PhilofSci 744: Social Issues in Computer Science.
Critical examination of attempts to assess societal consequences of current, prospective, & proposed uses of computers.
Fac: W Sedlow

c13 RadiationBio 108: Radiation, Environment & Man.
Consequences for man & environment of man's generation & use of power.
Fac: E Shaw

KENTUCKY

1270 EASTERN KENTUCKY UNIVERSITY
Richmond, KY 40351

General Studies Science Program (GS)

c01 GS 100: Science as Human Endeavor.
Sci. & tech., sci. & the non-scis., sci. & values.
Fac: B MacLaren, W Dixon, W Martin
3x

c02 GS 263: Ecology & Human Affairs.
Environmental impact statements.
ja; f.
Fac: W Martin
8x

c03 GS 280: Science & Society.
Case studies of areas of impact of sci. on society.
Fac: W Dixon, W Martin, J Wernegreen
6x

c04 Phil 385: Philosophy of Technology.
Interrelations of man, tech., & nature. Pro & anti tech. positions: Marcuse, McCluhan, Boulding, Skinner.
Fac: BJ Gray

1280 MOREHEAD STATE UNIVERSITY
Morehead, KY 40351

c01 Tech: Modern Technological Development.
Tech. in modern world--its development as response to social, political, & economic forces.
Burke; Huxley (1968); Vonnegut (1971); Crichton (1971a).
Fac: Hanrahan

1290 ST. CATHARINE COLLEGE
Springfield, KY 40061

c01 Phil 215: Technology & Ethics.
Ethical & political problems raised by & associated with modern tech.
Mitcham & Mackey; Huxley (1968); Josephson; Callahan.
Fac: C Mitcham

1300 THOMAS MORE COLLEGE
Fort Mitchell, KY 41017

c01 NatSci 209: Biology & Contemporary Ethical Issues.
Ethical & societal aspects, effects, & implications of present & proposed biological & medical studies from scientists' perspective.
b & ja; r.
Fac: WH Volker-Bio

1310 WESTERN KENTUCKY UNIVERSITY
Bowling Green, KY 42101

Abbreviations: UH = University Honors (courses usually offered only once)

c01 Ag (UH): Food (for Thought).
Problems & issues in food production/distribution, famines, green revolution, associated population problems, etc.
SA; p.
Fac: W Normand
8s; U

c02 Geol (UH): Science & Human Values. Nature of sci., philosophy of sci., sci. & values, public policy, etc.	S; AS. Fac: N Fields 15s; U

LOUISIANA

1320 LOUISIANA COLLEGE
Pineville, LA 71360

c01 ChemEcol 108. Role of chemistry in modern society & resulting ecological problems.	Hill; Turk, Turk, Wittes, & Wittes (1972). Fac: GW McGraw, DR Watson 5x; 40s

1330 LOUISIANA STATE UNIVERSITY
Baton Rouge, LA 70803

Abbreviations: ES = Institute for Environmental Studies
AEC = Academic Environmental Conservation Program

c01 ES/Arts&Sci 1000: Environment & Technology, a Perspective on Environmental Problems. Ecological stresses analyzed to determine fundamental nature & interrelationships, along with society's methods of response.	b & ja; av. Fac: JD Martinez Conserv 5x; 60s; U
c02 ES/Eng 1049: Engineering, Man & Energy. Engineering & treatment of technological developments relating to discovery, transmission, conversion, & utilization of various types of energy.	b & ja Fac: JR Johnson 1x; 20s; U
c03 ES 4000/Eng 4111/Arts&Sci 4111: Environmental Engineering. Survey of earth's physical system & processes & man's interaction with that system to provide perspective on impact of tech. on modern society.	b & ja; r; av. Fac: JD Martinez 10x; 45s; U, G
c04 ES/Eng 4149: Design of Environmental Management Systems. Analysis of integrated environmental systems planning, including technical, ecological, economic, legal, ntl, & foreign programs.	b & ja Fac: CA Whitehurst Conserv 2x; 14s; U, G
c05 Marketing: Marketing Environment. Impact of goods & services of the American industrial system as delivered, sold, priced, promoted to US markets. Emphasis on exposing students to government & social forces.	Fac: Richardson G

Colloquia/Lecture Series

1. ES Symposia: speakers from variety of research, academic, & professional areas invited regularly to lecture or participate in symposia. For faculty, researchers, students, & multidisciplinary professionals. Sponsored by ES, often in conjunction with other colleges & departments on campus.

1340 TULANE UNIVERSITY
New Orleans, LA 70118

p01 Tulane Program in Science, Technology & Man (STM)/Public Understanding of Technology Program (PUTP)

c01	Eng 311: Technology & Politics. Technological matters that become public, political issues.	b & ja Fac: RH Ebel-PolSci SC Cowin-MechEng STM 3x; 15s
c02	Eng 333: Man, Technology & Society. Basic philosophical issues created by technological society.	b & ja Fac: HF Hrubecky-MechEng JJ Buchanan-Classics STM 5x; 10s
c03	Eng 334: Medicine & Ethics. Nature of modern medical tech. & social & ethical problems raised by it.	b & ja Fac: SL Sullivan-ChemEng RB Nash-RelStaff STM 5x; 15s
c04	Eng 337: Technology & Art. Impact of scientific & technological concepts on color, form, & design.	b Fac: NB Boothby-Art DR Sears-MedSchool STM 2x; 8s
c05	Eng 340: Religion & the New Behavioral Psychology. Relationship of religion as transcendental & existential phenomenon & modern concepts of human behavior based on scientific, behavioristic models.	b & ja Fac: EC O'Neal-Psych GD Hopper-RelStaff STM 1x; 15s
c06	Eng 351: Technology, Music & the Theater. Consideration of way in which modern engineering & tech. transform the potential audio & visual aspects of the performing arts.	b & ja Fac: FL Monachino-Music HF Hrubecky-MechEng STM

c07 STM: Technology & the Human Prospect.

c08 STM: Technology Assessment.
Projected.
Fac: HF Hrubecky-MechEng
RH Ebel-PolScl

c09 STM: Philosophical Critiques of Technology.
Projected.
Fac: M Zimmerman-Phil

c10 Eng 350: Readings in the Scientific Classics.
n.s.: Plato, Lucetius, Aristotle, Galileo, Harvey, Bacon, Newton, Darwin.
Fac: WC Van Buskirk-MechEng
JJ Buchanan-Classics

Colloquia/Lecture Series

1. Impact of Technology upon the Industrial Worker & His Community (PUTP): for trade union leaders & business agents. Arranger: RH Ebel & HF Hrubecky.

2. Impact of Technology upon Contemporary Man, His Society, & His Future (PUTP): for business & professional people. Arranger: RH Ebel & HF Hrubecky.

Future Plans: (1) Tulane faculty study group on technology assessment; (2) Impact of Technology upon Contemporary Woman, Her Community, & Her Future (PUTP).

1350 UNIVERSITY OF SOUTHWESTERN LOUISIANA
Lafayette, LA 70501

c01 CompSci 300: Computers & Modern Society.
Impact of computers on society.
Cotterman
Fac: staff

c02 GenlEng 315: Technology & Society.
de Nevers
Fac: staff

c03 Phys 150: Foundations of Physics.
History & philosophy of sci., relationships between sci., tech., & society.
Fac: staff

MAINE

1360 COLBY COLLEGE
Waterville, ME 04901

Abbreviations: ESP = Environmental Studies Program
SHD = Studies in Human Development

c01 Rel 281-282: Cultural Euthenics: A New Adam & a New Eden.
Relationship between modern lifestyles & current environmental crisis. Analysis of some of economic, political, ethical, & religious aspects of essential reforms to achieve new era for new earth.
Fac: Todrank
ESP, SHD
30-40s

Colloquia/Lecture Series

1. "Mathematical Lectures" supported by GE Foundation: mathematics applied to social problems. For a general audience. Arranger: Department of Mathematics.

2. The Gabrielson Lecture Series: topics vary. 1974-75: The Energy Crisis. For a general audience. Arranger: Department of History & Government.

Future Plans: an evaluation of ESP is in progress.

MARYLAND

1370 GOUCHER COLLEGE
Towson, MD 21204

c01 Phil: Medical Ethics.
b & ja
Fac: E Grossman

c02 PolSci 250: IR2000+.
Future alternatives, including impacts of sci. & tech.
b & ja; av.
Fac: B Corrin
3x; 35s

c03 PolSci 317: Problems of Global Ecology.
Social, political, economic, sci. & tech. aspects of problems in communications, energy, defense, & population.
b & ja; av.
Fac: B Corrin
3x; 18s

1380 JOHNS HOPKINS UNIVERSITY
Baltimore, MD 21218

Abbreviations: HS = History of Science Department

c01 HS: Science & Technology in Contemporary Society.
Changing interaction of sci. & society; effects of industrial & electric ages on scientific thought & organization; evolution of scientist's role in society.
Fac: RH Kargon

c02 HS: Science, Technology & Utopia.
Study, using principally imaginative literature, of social hopes & fears engendered by sci. & tech. in western world.
Fac: W Coleman

c03 HS: Android: Artificial Human Beings in Literature & Myth from the Renaissance to the Present.
Traces concept of artificial human beings from medieval-Renaissance Golem legend through Frankenstein in attempt to illustrate changing relationship of man to his sci. & tech.
n.s.: Goethe, Mary Shelley, HG Wells; f.
Fac: RH Kargon

c04 HS: Studies in Biology & Society.
History of biology, public health, & related scis. Topics drawn from 1600-1920 & change over the years.
U
Fac: W Coleman

c05 HS: Health & Social Welfare in Western Society.
Historical consideration, from antiquity to about 1900, of individual vs. social ideal of physical well-being.
Fac: W Coleman

c06 HS: Science, Magic & Religion in Early Modern Europe.
Study of magical & occult tradition of Renaissance & its relationship to religious enthusiasm. Emphasis on influence of these movements on rise of sci. in late 16th & 17th C.
Fac: O Hannaway

c07 HS: Science Since the Scientific Revolution.
Historical development of the physical, biological, social, & psychological scis. from 18th C to present. Theory & application of the scis.; cultural & social contexts of scientific activity.
Fac: R McCormmach

c08 HS: Science Since World War II. Fac: R McCormmach
Dominant scientific developments & associated techs. in postwar world. Consideration of scientific ideas & of the philosophical & social relations of the scis.

c09 HS: Biology & Politics in the 20th Century. Fac: D Haraway
Interaction of biological thought, ideology, philosophy, social needs, & political theory.

c10 HS: Ethology, Evolution & Human Society. Fac: D Haraway
Examination of efforts to found ethics & politics on nature arguments drawn from 19th & 20th C biology.

1390 LOYOLA COLLEGE
Baltimore, MD 21210

c01 Bio 579: Seminar in Bioethics. Wertz; HCS.
Fac: JT Maier & guest speakers
3x; 15s

c02 Phys/Eng 111: Science in Society. Fac: MT Myers
40s
Sci. & tech. as methodologies & social institutions. Exponential change, scientism, anti-sci., control of sci.

1400 UNIVERSITY OF MARYLAND SCHOOL OF LAW
Baltimore, MD 21201

c01 Law C517: Law & Economics Seminar: Environmental Control. Fac: Garrett Power in collaboration with faculty from Geog & EnvEng at Johns Hopkins U
Relationship of law to economics with particular attention addressed to problems in environmental control.

c02 Law 529: Health Care Law. Fac: J Onek
American health care system & doctor-patient relationship.

c03 Law 593: Health Services Law Seminar. Fac: JJ Regan
Selected problems in health care delivery, patients' rights, & bioethics.

1410 UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE
Baltimore, MD 21201

c01 Legal Medicine. Fac: JM Brumbaugh
Torts, malpractice, doctor-patient relationship, fees, & contractual relationships between doctor & patient.

c02 Medical Ethics.
Doctor-patient relationship, medical ethics, doctor facing chronic disease, intentional suicide, dying patient, patient consent & understanding.
Fac: staff from clinical departments

1420 UNIVERSITY OF MARYLAND
College Park, MD 20742

p01 Committee on the History & Philosophy of Science (CHPS)
p02 Philosophical Issues in Public Policy (PIPP)

c01 Hist 201: Science & Technology in World History.
Survey of selected topics in history of sci. & tech.
Mason
Fac: J Bromberg
CHPS
U

c02 Hist 398: Special Topics in History: Development of Modern Theories of Heredity.
Fac: L Darden
CHPS
U

c03 Hist 401: The Scientific Revolution from Copernicus to Newton.
Changing views of the universe & nature in 16th & 17th C.
Fac: J Bromberg
CHPS
U, G

c04 Hist 402: The Development of Physical Thought from Newton to Bohr.
Systematic examination of physics from early 18th to early 20th C against background of developments in history & tech.
Bernal
Fac: J Bromberg
CHPS
U, G

c05 Hist 403: History of Technology.
Introductory survey of history of 19th & 20th C tech. Emphasis on changing interactions between tech., sci., & political, economic, & social events.
Fac: J Bromberg
CHPS
U, G

c06 Hist 404: History of Modern Biology.
Development of scientific ideas in several fields of biology. Emphasis on 19th & 20th C developments.
Fac: L Darden
CHPS
U, G

c07 Hist 405: History of Early Medicine: From Thaumaturgy & Theurgy to the 17th Century Theories.
Survey of evolution of medical concepts & practices from animism to Age of Genius. Emphasis on western medicine from its origins in Near East & Greece.
Fac: J Duffy
CHPS
U, G

c08	Hist 406: History of the Emergence of Modern Medicine.	Fac: J Duffy CHPS
c09	Hist 414: History of European Ideas (through the 18th Century). Emphasis on currents of thought that entered matrix of sci. in 17th & 18th C & impact of sci. & tech. on culture & thought of this period.	Fac: F Haber CHPS U, G
c10	Hist 415: History of European Ideas (19th & 20th Centuries).	Fac: F Haber CHPS U, G
c11	Hist 708: Readings in the History of Modern Science.	CHPS G
c12	Hist 808: Seminar in the History of Modern Science.	CHPS G
c13	Phil 250: Philosophy of Science I. Introduction to contemporary philosophy of sci.; historical development of views about aims, methods, & subject matter of sci.	Toulmin & Goodfield (1962; 1965); Shapere; Einstein & Infeld; Losee. Fac: L Darden CHPS 33s; U
c14	Phil 408.01: Choice & Decision. Examines existing models of man as rational being & tries to develop more adequate models.	Fac: I Waldner CHPS 25s
c15	Phil 450: Scientific Thought I. Development of sci., its philosophical interpretations & implications, & views of its methods from the Ancients through Newton & Leibniz.	Fac: D Shapere CHPS U, G
c16	Phil 451: Scientific Thought II. Critical survey of development of sci. since Newton, & of philosophical & historical interpretations thereof. Relations between sci. & other areas emphasized.	Fac: D Shapere CHPS 28s; U, G
c17	Phil 452: Philosophy of Physics. Implications of 20th C physics for problems such as operationalism, structure & purposes of scientific theory, etc. Interaction between physics & philosophy is central theme.	n.s.: Einstein, Heisenberg, Bohr, Putnam, Popper, Reichenbach, Poincare, et.al. Fac: M Gardner CHPS U, G

c18	Phil 453: Philosophy of Science II. Intensive systematic survey of philosophical thinking in this century on main problems in the philosophy of sci.	n.s.: Brody, Grandy, Skyrms, Suppe. Fac: F Suppe CHPS U, G
c19	Phil 455: Philosophy of the Social Sciences. Consideration of philosophical issues arising in social scis. with emphasis on issues of practical methodological concern to social scientists.	Fac: I Waldner CHPS U, G
c20	Phil 456: Philosophy of Biology. Philosophical issues related to biological scis. Examples from specific cases in history of sci.	Hull; Simpson; Munson; Ruse. Fac: L Darden CHPS 28s; U, G
c21	Phil 458: Topics in the Philosophy of Science: Philosophy of Psychology. Consideration of philosophical issues arising in psychology.	Fac: I Waldner CHPS U, G
c22	Phil 458.01: Space & Time. Critical examination of concepts of space & time & their roles in sci., philosophy, & other areas of human activity & inquiry.	Fac: D Shapere CHPS 28s
c23	Phil/Govt&Pol: Philosophical Issues in Public Policy. Social welfare economics, intnl food distribution, & quality control of health care.	Fac: staff from Econ, Phil, Govt&Pol, & guest speakers PIPP 1x
c24	Phil 342.01: Moral Problems in Medicine. Moral questions raised by advances in medical tech. & problems of health care delivery; role of moral commitments in medical decision making.	Fac: S Gorovitz 50s

Colloquia/Lecture Series

1. History & Philosophy of Science Colloquium Series: weekly. For university-wide audience. Arranger: CHPS.

MASSACHUSETTS

1430 AMHERST COLLEGE
Amherst, MA 01002

Abbreviations: FS = Freshman Seminar

c01 Bio 18: Human Genetics: Science & Society.
Facts & techniques of genetics of man used as basis of discussion of sci. & society.
Fac: Hexter

c02 Chem 10: Chemistry & Technological Society.
Introduction to fundamental principles of chemistry; interrelationships between initial discovery, subsequent development, & beneficial or destructive use of tech. in our society.
Fac: Fink

c03 FS 1: Behavior Control.
Nature & use of contemporary techniques for controlling behavior. Analysis of assumptions underlying various techniques of control & political & ethical concerns involved in their application.
n.s.: BF Skinner & his critics; Burgess (1962); Orwell (1971);
Fac: Olver & student

c04 FS 3: Perceptions of Science.
World of sci. as portrayed in writings of practitioners & spectators. Use & misuse of scientific discoveries by society.
n.s.: Pasteur, Vallery-Radot, JD Watson, Zh. Medvedev, GG Simpson, A Koestler, TS Kuhn, D Greenberg, K Vonnegut, Jr.
Fac: Silver & senior student

c05 FS 9: Apocalypse, Enlightenment, & Plans of Life.
Prospects for humanity in next century as presented in The Limits to Growth & related documents.
n.s.: RB Fuller, I Illich.
Fac: Thurman & student

c06 Phil 21: Topics in Philosophy: Medical Ethics.
Fac: Kearnes

c07 Psych 46: The Causes & Control of Violence.
Etiology of aggressive behavior & its potential control. Interaction of individual & social variables; implications of these variables for prevention & control of violence.
Fac: Sorenson, Weigel

1440 BABSON COLLEGE
Babson Park, MA 02157

p01 Society & Technology (ST)

c01	ST 400: History of Technology. Growth of civilizations from point of view of technological change.	Fac: R McKeon 3x; 60s; U
c02	ST 401: Processes of Technological Change. Effects of tech. in structure & performance of our economy; industrial adaptation in age of tech.; consequences of economic changes on social organization, political action, cultural values.	Fac: W Casey 3x; 40s; U
c03	ST 402: Technological Society. Influence of tech. on contemporary society. Impact of tech. on structure of American society. Problems in assimilation of tech. by developing countries.	Fac: R McKeon 3x; 40s; U
c04	ST 403: Technologies in America's Future. Major technological developments expected in next 2 decades; their social, cultural, & political implications. Impact of tech. on business.	Fac: W Rybolt 3x; 40s; U
c05	ST 404: Technology & Human Values. Ways man's increasing technological capabilities have influenced his values; influence of beliefs & conceptual systems upon technological progress.	Fac: R McKeon 3x; 40s; U
c06	ST 405: Science & Technology in American Politics. Multiple relationships between American political system & scientific & technological institutions & developments.	Fac: L Godtfredsen 1x; U
c07	ST 406: Technology's Effect upon Human Behavior. Influence & consequences of rapid modern technological advances & changes upon behavior & security of man.	Fac: C Rotman 3x; 40s; U
c08	ST 407: Seminar in Technology & Society. Special topics determined by instructor & senior majors.	1x; U

Future Plans: ST in process of long range planning now.

1450 BOSTON UNIVERSITY
Boston, MA 02215

Center for Energy Studies
p01 Center for Philosophy & History of Science (PHS)
p02 Physics (Interdisciplinary) (CLA PY)
p03 Science Communication Program (SC)

Abbreviations: DSMS = Department of Socio-Medical Sciences, School of Medicine

c01 CLA PY 134: Modern Physics & Political Problems.
Impact of physics on social & political problems & their impact on development of physics--post WWII America.
Fac: Stachel

c02 CLA PY 138: Science & Religion.
How religion sees sci.; how sci. understands religion.
Fac: RS Cohen

c03 CLA PY 139: Beauty, Mathematics & Science.
Art, aesthetics, math, & sci. viewed in unified manner as search for & implementation of structure.
Prall; Dawdy; Schrooer.
Fac: P Roman

c04 CLA PY 232: Human & Scientific Dimensions of the Technological Age.
Historical, sociological, political, & psychological approach to man's love-hate relationship with tech.
n.s.: Henry Adams, Harrison Brown, Norbert Wiener, Herman Kahn, Daniel Bell, Jacques Ellul.
Fac: Siegel

c05 CLA PY 235: History of Physical Science.
Origins & development of physical sci. from early times. External (social) & internal aspects.
Fac: RS Cohen

c06 CLA PY 237: Science in Literature.
Influence of sci. on literature from Enlightenment to present day.
n.s.: Donne, Pope, Swift, Blake, Wordsworth, Lewis Carroll, Samuel Butler, Huxley, Orwell, etc.
Fac: Siegel

c07 CLA PY 239: Gifts of Science--Hopes & Fears.
Origins & present character of sci.-based technological society. Case histories of interaction of tech. & policy.
Fac: Kowarski

c08 CLA PY 331: Einstein--the Man, the Times, the Achievement.
Einstein's contribution as scientist; the man as scientific & social rebel, involvement in philosophical, social, & political issues.
Fac: Stachel

c09	SC 705: Science, Technology & Public Policy I. Sci. policy & its effect on modern society. Establishes guidelines for writing evaluative articles on likely impacts of new scientific & technological advances.	Caldwell & DeVille; ja & b. Fac: HG Buchbinder 10-15s.
c10	SC 706: Science, Technology & Public Policy II. Continuation of 705; emphasis on intnl technoscientific organization, politics, & law.	b & ja Fac: HG Buchbinder & guest speakers 10-15s
c11	SC 730: Technology Assessment. Guides students in use of their investigative skills to write articles that anticipate the near & distant social impacts of current & proposed technological innovation.	b & ja Fac: K Olson 10-15s
c12	SC 731: Transfer of Technology. Methods of transferring scientific & technical knowledge.	b & ja Fac: HG Buchbinder & staff 10-15s
c13	Chem 151: Science for the People? Relationship of sci. to social & political problems.	Fac: Lowe
c14	Eng EK 110: Technology & Man. Comprehensive historical review of major technological discoveries & milestones. Tech.'s role in developing the advanced industrial nations.	
c15	Hist 555: Impact of Darwin.	Fac: Glick, Hall
c16	Hist 559: Medicine in Modern Society.	Fac: D Hall
c17	Hist 610: The Organizing Age, 1865-1901. The social history of tech. in 19th C.	Fac: R Bruce
c18	Hist 765: History of American Science & Technology.	Fac: R Bruce
c19	ME (DSMS) 839: Seminar in Pharmacology & Society.	Fac: Pelikan, Estes
c20	Phil 209: Medical Ethics.	Fac: D Solomon
c21	Phil 832: Contemporary Issues in Philosophy of Science.	Fac: Agassi G
c22	Phil 834: Philosophical Problems in Foundations of Biology.	Fac: staff G

c23 Phys 892: Seminar: Philosophical Foundations of Physics.
Fac: Shimony, RS Cohen
G

c24 Psych 506: Themes in the Near-History of Psychology.
Fac: staff

Colloquia/Lecture Series

i. Boston Colloquium for the Philosophy of Science: for faculty, research scholars, public. Annual program. Arranger: RS Cohen, PHS.

Future Plans: Center for Energy Studies is planning a Ph.D. program in energy to incorporate both technological aspects & societal implications of energy & its alternatives.

1460 BOSTON UNIVERSITY SCHOOL OF LAW
Boston, MA 02215

p01 Center for Law & Health Sciences (LHS)

c01 Law 751: Children at Risk: Medicolegal Problems of Minors.
Examination of children at risk in our society because of health-related problems & of effectiveness of services provided these children.
b & ja
Fac: JJ Alpert-SchMed
LH Glantz-Law
LHS
25s; G, L

c02 Law 755: Law & the Rights of the Mentally Handicapped.
Interaction of law & psychiatry in different contexts in which "the law" is applied to mentally ill & mentally retarded.
Fac: G Dybwad-Brandeis
JP Wilson-Law
LHS
15s; G, L

c03 Law 759: Advanced Topics in Law & Medicine.
Areas of current medicolegal concern that are susceptible to solution through legislative process or institutional change.
Annas; D (Spring 1969); US Dept. of HEW; BU Law Review (March 1974).
Fac: GJ Annas
20s; L

c04 Law 761: Health Care Policy, Regulation, & National Health Insurance.
Introduction to broad range of health care policy issues currently being debated & decided on state & federal level.
Redman; Annas; Havighurt; ja.
Fac: GJ Annas
LHS
G, L

c05 Law 762: Genetics & Law.
Legal & public policy issues raised when regulation of genetic tech. is contemplated.
b & ja
Fac: S Lederberg-Brown U
GJ Annas-Law
LHS
20s; G, L

c06	LHS: The Dying Patient: Medical, Legal, & Ethical Issues. Issues involved when patients diagnosed as terminal.	b & ja Fac: N Cassem-Harvard Med Sch GJ Annas-Law 15s; G, L
c07	LHS: Human Experimentation. When human experimentation is justified; rights of subjects, especially children, retarded, poor, prisoners, mentally ill.	Katz Fac: GJ Annas LH Glantz 15s; G, L
c08	LHS: Seminar: Coming of Age in America--Psychological & Legal Issues. Psychological & social conditions involved in age at which Americans achieve various legal capacities & statuses.	b & ja Fac: JC Spelsman-Psych HA Beyer-LHS 15s; G, L
c09	Law: Computers & Law. Examination of unique substantive legal aspects of computer-communications tech. as means of teaching legal method generally.	Freed Fac: R Freed
c10	Law: Law & Social Control of Science & Technology Legal & ethical frameworks for control & direction of sci. & tech.	b & ja Fac: MS Baram-MIT (offered jointly at MIT & Boston U Sch Law) G, L
c11	Law: Coastal Resources Management. Legal aspects of coastal land & water use planning & management under Coastal Zone Management Act of 1972.	b & ja Fac: D Rice
c12	Law: Environmental Law. Some of the legal & administrative problems of protecting & enhancing quality of human environment in face of economic growth demands of highly industrialized society.	Hanks, Tarlock, & Hanks Fac: S Huntington
c13	Law: Seminar on Energy & the Environment. Consideration of selected environmental problems connected with supply of & demand for energy.	Fac: S Huntington

Colloquia/Lecture Series

1. LHS sponsors 2-3 public symposia yearly on medicolegal topics; subjects have included psychosurgery, fetal research, health hazards of nuclear energy. For physicians, lawyers, law & medical students, general public. Arranger: LHS.

2. Environmental Law Society (ELS) sponsors 1-2 symposia each year on various environmental issues. ELS also has an active speakers program throughout the year. For law students, lawyers, government administrators, general public. Arranger: ELS.

Future Plans: LHS plans to examine proposed federal regulation on subject consent to experimentation & to conduct research on the legal & ethical issues surrounding euthanasia of defective newborns.

1470 BRADFORD COLLEGE
Haverhill, MA 01830

c01 Geog 104: Urban Environmental Systems. Society's use & management of resources & environment in cities.
Detwyler, et.al.; b & ja.
Fac: JL Roberts
UrbanStud, Sci
3x; 20s; U

c02 Phil 104: General Systems Theory. Compares organizational systems of sci. with psycho-social predicament of man.
Bowler
Fac: TD Bowler
8x; 30s; U

1480 BRANDEIS UNIVERSITY
Waltham, MA 02154

c01 Soc: Critique of Contemporary Society. Impact of technological society on social perception, interaction, & values.
n.s.: Ellul, Holloway, Marcuse.
Fac: G Hayim

c02 Soc: Sociology of Science. Role of scientist in political, social, & moral reality of today.
Fac: C Fisher

1490 BRIDGEWATER STATE COLLEGE
Bridgewater, MA 02324

c01 NatSci 100: Science, Technology & Society.
b & ja
Fac: WB Chipman
ChemSci

1500 BRISTOL COMMUNITY COLLEGE
Fall River, MA 02720

c01 Sci 17: History & Philosophy of Science. Philosophical, political, economic, & social underpinnings of sci. since ancient times. Conceptual framework within which scientists in each age have had to work.
n.s.: Galileo, Brecht, Bertholt.
Fac: JW Pelletier

1510 CLARK UNIVERSITY
Worcester, MA 01610

p01 Environmental Affairs (EA)
p02 Science, Technology & Society (STS)

c01	EA 202: The Biosphere. Biological context & perspective for analysis & assessment of manmade environmental hazards.	Watt (1973) Fac: J Reynolds-Bio/EA 1x; 19s
c02	EA 203: Man's Perception of His Environment. Man's reaction to environmental changes.	Ittelson; ja. Fac: D Seamon, staff, & guests 44s
c03	EA 204: Environmental Plans & Programs. Overview of planning process; emphasis on New England region.	ja Fac: H Schwarz, guests 1x; 26s
c04	EA 210: Environmental Protection--Law for New Lawyers. Legal basis of environmental protection.	ja Fac: G McGregor 1x; 39s
c05	EA 250: Practical Problems in Environmental Affairs. Work-study.	Fac: H Schwarz 2x; 28s
c06	EA/Geog 260: Politics of Environmental Management. Case method analysis applied to fictional cases of decision making on environmental issues.	Benveniste; Crenson; Ebbin & Kasper; Sax. Fac: R Kasperson 2x; 20s
c07	STS 10: Introduction to Technology & Society.	b & ja; n.s.: Commoner, Ehrlich, Hardin, Meadows. Fac: staff 2x; 50s
c08	STS 101: Introductory Case Studies. Detailed study of urban transportation in Boston area, including physical, economic, & social descriptions.	Fac: C Hohenemser 1x; 10s
c09	STS 121: Energy Self Sufficient Habitat. Design of single family home with goal of maximum energy conservation.	Fac: M McClintock-Phys/STS D Krueger-Arts 1x; 10s
c10	STS 142: Environmental Chemistry. Chemistry of problems of the environment.	Manahan Fac: H Allen-Chem AA Jones-Chem 3x; 7s
c11	STS/Geog 150: Aquarius. Workshop on water resource planning; computer simulation.	Fac: staff from Geog, Bio, STS 7x; 15s
c12	STS 161: Population, Resources & Health. Presents & seeks solutions to problems of rapid population growth, high level tech., & dwindling resources.	Ehrlich & Ehrlich; Boughey. Fac: C Hohenemser-Phys/STS JT Reynolds-Bio/STS

c13	STS 201: Energy & Society. Energy use by man; comparative energy techs. & use pattern; relation of energy use to life style.	SA (9/71); b. Fac: M McClintock-Phys/STS C Hohenemser-Phys/STS 3x
c14	STS 211: The Dynamics of Systems. Understanding of contribution of computer simulation to understanding alternative social, economic, & technological policies.	Fac: H Gould-Phys AM Gottlieb-Phys 1x; 12s
c15	STS/Bio 239: Biological Systems & Water Pollution Control. Problems of water pollution control that are accessible via biology.	Fac: JT Reynolds 5x; 15s
c16	STS/Geog 256: Scientific Information & Societal Response to Environmental Hazard.	Fac: R Kates-Geog/STS M McClintock-Phys/STS C Hohenemser-Phys/STS R Kasperson-Pol/STS 15s
c17	Econ 123: Special Problems: Oil. Evolution of oil crisis.	n.s.: Morris Adelman, RT Miller, Mitchell. Fac: RC van Tassel 2x; 20s
c18	Geog 257: Spatial Aspects of Resource Utilization. Cost-benefit analysis, environmental impact statements, equilibrium models of pollution.	Fac: S Feldman 2x; 15s
c19	Geog/Hist 263: The Future--Ways of Knowing & Survival. Possibilities & limitations of future studies practice trend projections, systems simulation, scenario preparation, etc.	Fac: R Kates-Geog T von Laue-Hist 1x; 50s
c20	Govt 238: Transnational Perspectives in International Relations. Geography & economics of intnl needs; apportioning world resources, the environment, & technological growth.	Keohane & Nye; S Brown. Fac: O Marwah-Govt/IR 1x; 15s
c21	Govt 278: Nuclear Energy Politics. Decision making & ntl policy on nuclear energy; emphasis on safety issues.	Fac: R Kasperson
c22	Govt 292: Nuclear Weapons Politics. Intnl effects of nuclear weapons proliferation.	Fac: O Marwah 15s

Colloquia/Lecture Series

1. STS Colloquium: for faculty & students. Arranger: M McClintock & C Hohenemser.

1520 COLLEGE OF THE HOLY CROSS
Worcester, MA 01610

Abbreviations: SS = Special Studies

c01 SS: *Man & the Environment.* Interdisciplinary study of American landscape from environmental & ecological point of view.
Fac: Beyea & others

c02 SS: *Science, Technology & Contemporary Culture.*

c03 SS: *Evolution & Its Impact on Contemporary Culture.*

c04 Chem 44: *Chemistry & Society.* Chemistry/sci. as a human endeavor.
ja; Giddings; Hoffmann; Barbour (1972); Fischer; Watson; av.
Fac: GA Vidulich

1530 DEAN JUNIOR COLLEGE
Franklin, MA 02038

c01 SocSci: *Population & Human Ecology.* Critical examination of interrelationships between population & society.
ja; p.
Fac: KS Grewal

1540 GARLAND JUNIOR COLLEGE
Boston, MA 02215

c01 ID 107: *Science in America.* Scientific & social problems; scientific knowledge & human behavior; values in a technological age.
Fischer
Fac: Goldhaber, Sanborn

c02 Sci 106: *Ecology I.* Biological, economic, & sociological aspects of current ecological problems throughout world.
b
Fac: Goldhaber

1550 HAMPSHIRE COLLEGE
Amherst, MA 01002

p01 *Environmental Science & Public Policy* (ESPP)

Abbreviations: D&B = Death & Birth Program
MSS = Topics in Medical Social Science

c01	NatSci 124/241: Arms Control & Disarmament. Military tech.; Pentagon spending & arms race--history & current situation.	b & ja Fac: A Krass 1x: 10s
c02	NatSci 142/242: Montague Nuclear Plant Research Project. Interdisciplinary faculty/student research project covering topics such as nuclear safety & energy alternatives; environmental considerations in nuclear facility siting; formation of public attitudes toward nuclear power.	Fac: A Krass, RP Coppinger, L Wilcox, D Kerr, J Hornik ESPP
c03	NatSci 180: Technology Assessment. Selected case studies: space shuttle, proposed nuclear power plant.	b & ja Fac: A Krass, L Wilcox ESPP 3x; 15s
c04	NatSci 181-182: The Energy Crisis. Energy sources & conversion; energy conservation & long range policy.	Hammond, Metz, & Maugh; S (4/19/74); Lapp; Halacy. ESPP 2x; 12s
c05	IN 305: Madness. Examines madness from any perspective that participants choose to apply, including legal, sociological, literary, humanistic, & psychological.	Fac: O Fowlkes, L Mazor, B Yngvesson
c06	IN 333: Science, Scandal & Society. Examination of selected cases of scandal in sci. to determine whether scandals occur only in sci., &, if so, why.	Fac: A Woodhull, M Gross
c07	Lang/Comm 193: Public Opinion. Analysis of local public attitudes toward nuclear power.	ja Fac: J Hornik, D Kerr
c08	NatSci 102: Do We Have to Die? Is aging wearing down of life's machinery (which may be replaceable) or are there specific mechanisms (e.g., genetical programs) which initiate process of aging?	Fac: staff of D&B Program D&B
c09	NatSci 104: How Will They Decide if You've Died? Readings of various ways medical workers define death; attempt to decide whether one or more of the definitions is valid enough to justify "pulling the plug" or transplanting an organ.	Fac: A Woodhull

c10	NatSci 108/SocSci 207: A Women's Studies Analysis of Bio-Medical Issues II. Health care & delivery; death & dying; sex conversion surgery--gender identity & sex role specialization.	Fac: J Raymond, N Goddard MSS
c11	NatSci 122: Montague Power Plant. Core lecture series on impact of proposed nuclear power plant in town of Montague, MA.	Fac: A.Krass, L Wilcox, J Hornik, D Kerr guest speakers
c12	NatSci 126/226: Human Genetics. Investigation of problems in human genetics & its current proposed applications.	Fac: L Miller
c13	NatSci 145: Energy & Society. Review of scientific, technological, economic, social, & political aspects of energy crisis; implications of different solutions.	Fac: E Frankel
c14	NatSci 151/SocSci 206: Doctor as Scientist: A History of Medicine. How & why medicine became "scientific" in the West.	Fac: M Gross MSS
c15	NatSci 152: Alchemy. Reading of some histories & interpretations of, & original sources in, alchemy. Determination of what alchemists were trying to do & why they thought their objectives were reasonable.	Fac: M Gross, N Lowry
c16	NatSci 190/ES 106: The Enterprise of Science. Relationship between sci. & other social institutions.	Fac: S Goldberg
c17	OP 250: Ethics & the Environment. Examines views of number of authors in areas of ecological, evolutionary, & wilderness ethics.	Fac: R Lutts 20s
c18	SocSci 198: The Forgotten People: Law & the State Mental Institution. Why mental institutions exist & whose interests they serve; relationship between law & psychiatry; impact of new legislation, litigation, & patient liberation movements.	Szasz; f. Fac: O Fowlkes 20s
c19	SocSci 202: Medical Systems: Health Care or Social Control. Examination of modern western medicine using radical feminist & socialist critiques. 3 cases: US women, urban American blacks, & rural peasants in Chile.	Fac: J Raymond, faculty supervisor of student instructors

c20 SocSci 203: Economic Perspectives on Medicine. — Fac: L Nisonoff, faculty supervisor of student instructors
Economic, political, & social factors which influence policy formation & practice in delivery of medical care. — MSS

c21 SocSci 205: The Philosophy of Death & Dying. — Fac: M Gross, J Meister, faculty supervisors
Attempts to bring personal understanding of death which will facilitate dealing with death in our culture. — MSS

Colloquia/Lecture Series

1. 5-College Science & Public Policy Lecture Series: for 5-college students & faculty. Arranger: R Tinker.
2. Hampshire College Faculty Seminar on Science & Public Policy & Environmental Quality: for faculty. Arranger: A Krass, L Wilcox.

1560 HARVARD UNIVERSITY
Cambridge, MA 02138

Center for Energy & Environmental Policy
p01 Kennedy Interfaculty Program in Medical Ethics (KIP)
p02 Program for Science & International Affairs (PSIA)
p03 Program on Information Technologies & Public Policy (PITPP)
p04 Program on Public Conceptions of Science (PCS)

c01 Med: The Physician in Society. — KIP
Intensive, interdisciplinary research seminar. — 2x; 13s; M, G

c02 PubHealth: Human Rights in Health. — Fac: WJ Curran
KIP
3x; 54s

c03 HarvardColl: Problems in Medical Ethics. — Fac: S Reiser-HistMed
A Dyck-PopulEth
KIP, GenlEducProg
2x; 180s

c04 KIP: Ethical Aspects of Population Policy. — Fac: A Dyck-PopulEth
R Potter-DivinitySch
Advanced seminar applying ethical reasoning & standards to population policy programs on intnl & ntl levels. — 13s

c05 AppliedMath 299r: Special Topics: The Data Processing Industry. — Fac: M Phister, Jr.
PITPP
How economic & technological factors have interacted to sustain development & growth of data processing industry. Current industry problems.

c06	NatSci 130: Communication in Societies. Sci. & tech. of communication among men, animals, & machines; its effect on social organization.	Fac: AG Oettinger, WH Bossert PITPP 75s
c07	Plng 241: Planning for Urban Communication. Planning & development of urban communication systems, including impact on urban economics, social service delivery, community politics, education.	Fac: K Kalba PITPP
c08	PubPol 2836: Seminar: Information Technologies & Public Policies. Public policy issues about evolving role of information techs. at all levels of government.	Fac: AG Oettinger, WM Capron, & others PITPP
c09	PITPP: Freshman Seminar Program 1974-75. Ongoing rapid changes in information techs. & their scientific base; economic stakes in information systems; relations between distribution of information & power in society; legal traditions of information industries; impacts on individuals & organizations.	Fac: AG Oettinger
c10	Afro-AmerStud 140a: Science, Technology, & Black Community Development. Cultural factors influencing sci. & tech. Process of formulating engineering solutions to variety of problems in minority communities. Global aspects of minority-oriented tech.	
c11	Econ 1551: The Political Economy of Environmental Quality. Economic & political structure of environmental problems & policies. Why environmental deterioration occurs, what might be done, evaluation of current policy.	Fac: HA Thomas, Jr., JJ Harrington
c12	Econ 2570hf: Research Seminar: Economics of Environmental Quality. Economics of environmental quality & related topics.	
c13	HistSci 140: History of Medicine. Scientific, clinical, & social development of western medicine.	Fac: SJ Reiser
c14	HistSci 203r: Seminar: Science & the Concept of Man & Society: the Enlightenment & the 19th Century.	Fac: IB Cohen

c15	HistSci 213r: Seminar: Social Aspects of the Growth of Modern Science. Selected problems in development of sci. as social phenomenon, treating conceptual & institutional structures of sci. & relations of sci. to modern society.	Fac: EI Mendelsohn
c16	HistSci 214r: Seminar: Medical History: the Social & Scientific Framework. Traditions of writing history of medicine, focusing on integrating several segments of medicine: scientific, health care, professional organizations.	Fac: EI Mendelsohn, B Gutmann Rosenkrantz
c17	HistSci 224r: Seminar: Physical Science & Religion Since 1800. Historical examination of selected topics on interaction of sci. & religion from 1800 to present.	Fac: EN Hiebert
c18	NatSci 111: Computers in Society. Hardware & software limitations on potential role of computers. Political, economic, cultural, social, & moral issues raised by increased capability to retrieve & process information & automate decision making.	Fac: WJ Raduchel
c19	NatSci 134: Technological Assessment. Evaluation of impact of existing & prospective techs. with respect to their environmental, social, & economic consequences.	Fac: H Brooks
c20	PubPol 245: Seminar: Arms Control & the Decision Process. Impact of decision procedures on problems of arms control & defense policy.	Fac: JD Steinbruner
c21	PubPol 282: Seminar: Science, Technology, & Public Policy. Stimulation & control of sci. & tech. by political & administrative institutions; management of technological change.	Fac: H Brooks, IB Cohen, DK Price, et al.
c22	SocSci 107: The Scientific Revolution & Its Consequences. Emergence of sci. as new intellectual force in late 16th & 17th C. Role of sci. in intellectual history of 18th C. Effects of sci. on social, political, & economic thought.	Fac: IB Cohen
c23	SocSci 108: Foundations of the Age of Science: 18th & 19th Century. Growth & influence of scientific concepts, theories, & methods in 18th & 19th C.	Fac: IB Cohen

c24	SocSci 119: The Social Context of Science. Social aspects of growth of modern sci.--interaction of sci. & society; emergence of sci. as social institution.	Fac: El Mendelsohn
c25	SocSci 141: Psychological & Social Aspects of Medicine. Relationships among biological, psychological, & social factors in onset & course of illness. Cultural factors in organization of medical profession.	Fac: SH King, JC Nemiah
c26	SocSci 153: Science, Scientists, & Society. Sci. as social activity; processes by which individual becomes scientist, norms which govern behavior, kind of society scientists form at working level.	Fac: D Zinberg
c27	SocSci 159: Technology, War & Peace. Technological, political, & economic factors that have shaped the issues of war & peace over last 30 yrs. Emphasis on nuclear weapons systems & strategies, & on theory & practice of strategic arms control.	SA; US Arms Control & Disarmament Agency; Art & Waltz; Brodie & Brodie; L Martin. Fac: P Doty, A Carnesdale, ML Nacht
c28	SocSci 168: Sound & Light: Mass Telecommunications as an Avenue to Civilized Society. Advent of sound-&-light in mass communication & its gathering effect on modern society. Political, cultural, & moral influences.	Fac: R Saudek & guest lecturers
c29	Soc 238: Social Forecasting. Review of different areas of forecasting--demographic, technological, economic--& different techniques. Futurological studies.	Fac: D Bell

Colloquia/Lecture Series

1. PITPP-Faculty Seminar: for Harvard faculty, selected students, & visitors from outside the university. Arranger: AG Oettinger.
2. Harvard-MIT Joint Arms Control Seminar: attendance open. Arranger: A Carnesdale, PSIA.
3. Study Group on Defense Strategy & Arms Control: for students & faculty. Arranger: A Carnesdale, PSIA.

1570 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Cambridge, MA 02139

Center for Policy Alternatives (CPA)
p01 Energy Laboratory (EL)
p02 Program in Science, Technology & Public Policy (STPP)
p03 Technology Adaptation Program (TAP)
p04 Technology & Culture Seminar (TCS)
p05 Technology & Public Policy (TPP)
p06 Technology Studies Program (TS)

c01	STPP 17.03J/TS 21.783J: Value, Choice, & Risk in Modern Technology. Social effects of 20th C tech. from historical, contemporary political, & technical perspectives.	b & ja Fac: J Yellin, E Skolnikoff 1x; U
c02	STPP 17.41: Science, Technology & Politics. Impact of sci. & tech. on political structures & processes; role of scientist & engineer in decision making. Major public policy issues posed for governments by tech.	b & ja Fac: HM Sapolsky 10x; U
c03	STPP 17.42J: Political Theory & Technical Society. Ways in which tech. is problematic for modern political theory.	b Fac: L Winner 1x; 10s; U
c04	STPP 17.45: In Pursuit of Arms Control. Role in ntl security planning since WWII.	b & ja Fac: T Greenwood 1x; U
c05	STPP 17.61: Arms Trade & Foreign Policy. Intnl trade in arms from perspective of producing & nonproducing states.	b Fac: A Leiss 1x; 9s; U
c06	STPP 17.841J: The Nuclear Arms Race & Arms Control--Technology & Government Policy. Decision-making process relating to ntl security based on interaction of technological assessments with political & economic judgments.	b & ja Fac: GW Rathjens, J Ruina 5x; 15s; G
c07	STPP 17.850: Science, Technology & the State. Impact of sci. & tech. on political structures & processes; role of scientist & engineer in decision making. Major public policy issues posed for governments by tech.	b & ja Fac: HM Sapolsky 10x; 15-20s; G
c08	STPP 17.851: The Domestic & International Politics of Energy.	b & ja Fac: T Greenwood 1x; G

c09	STPP 17.855: Seminar in Health Policy. The health system, its politics & tech.	b & ja Fac: HM Sapolsky 1x; 20s; G
c10	STPP 17.856: Seminar in Technology Assessment & Public Policy.	b & ja Fac: GW Rathjens, T Greenwood 1x; 15-20s; G
c11	STPP 17.860: Topics on the Public Management of Science & Technology. Economic, technical, & institutional factors influencing government participation in scientific & technological enterprises.	b & ja Fac: T Greenwood 5x; 20s; G
c12	STPP 17.861: Seminar in Systematic Policy Analysis. Policy problems illustrative of those facing federal & local governments.	b & ja Fac: RW Rathjens 3x; 10s; G
c13	STPP 17.865: International Response to Science & Technology. Intnl political, legal, & institutional implications of selected areas of sci. & tech.	b & ja Fac: EB Skolnikoff A Chayes-HarvardLaw 5x; 25s; G
c14	STPP 17.866: Comparative Science Policy: National Development & International Politics. Problems of economic & political development, resource allocation, innovation, & tech. transfer.	b & ja Fac: N Choucri 3x; 10s; G
c15	STPP/PolSci 17.867J/CivEng 1.913J/Econ 14.774J: Transfer & Adaptation of Technology in Developing Countries. Problems of transferring & adapting techs. originating & used in richer countries to developing nations.	b Fac: N Choucri-STPP F Moavenzadeh-CivEng R Eckaus-Econ 3x; 10s; G
c16	STPP 17.997: Theories of Technological Society & Politics. Ways in which tech. is problematic for modern political theory.	b Fac: L Winner 1x; 10s; G
c17	TS 21.77J/NuclEng 22.82: History of Nuclear Engineering: A Case Study in the Interaction Between Technology & Society. Physical bases of large-scale applications of nuclear energy & of problems arising from these applications.	Fac: I Kaplan, N Sivin G
c18	TS 21.78: Technology, Innovation, & Culture.	Fac: L Bucciarelli

c19	TS 21.773/Hum 21.931: Mathematics & Society. Mathematics as social activity of man as well as intellectual activity, from prehistoric to modern times.	Fac: Struik U
c20	TS 21.774/Hum 21.955: Chinese Science & Natural Philosophy. Study of theoretical approaches to nature & their connections with rest of knowledge & experience, mainly before scientific influence of the West became overwhelming.	Fac: N Sivin U
c21	TS 21.775: Emergence & Growth of New Research Fields: A Social History.	Fac: C Weiner
c22	TS 21.776J: Understanding the Discovery Process: An Historical Approach.	Fac: WD Kingery
c23	TS 21.781: Social Responsibility of the Scientist & Engineer: Contemporary Issues & Historical Perspectives.	Fac: C Weiner
c24	TS 21.782: The Role of Blacks in American Science & Technology.	Fac: K Manning
c25	TS 21.784: Theories of Technological Society & Politics.	Fac: L Winner
c26	TS 21.785: Alternative Technologies.	Fac: L Winner
c27	TS 21.791J/Arch 3.683J/Phys 81.202J/Hum 21.956J: Science, Technology & Ritual. Study of ritual related to sci. & tech. in traditional & modern societies from anthropological, historical, & sociological perspectives.	Fac: G Nitschke, P Morrison, N Sivin U
c28	TS 21.792J: Aesthetics in Science & Technology.	Fac: J Wechsler
c29	Bio 7.09J/Hum 21.941J/Phil 24.116J: Seminar in Technology & Society: Ethical & Social Issues in Bio-Medicine. Examination, using case studies, of ethical & social implications of development & application of biomedical sci. & tech.	Fac: JA King, JJ Thomson, RW Wertz U
c30	ChemEng 10.92: Seminar on Technology Assessment. Examines methods for predicting long-range impact of technological developments on society.	Fac: LB Evans G

c31	CivEng 1.01: Ethics & Technocrats. Value perspectives of those in technocratic professions--engineers, economists, systems analysts, etc. Influences various professions have had on society.	Fac: ML Manheim U
c32	CivEng 1.82: Environmental Management Processes. Definition, scope, & functions of environmental management. Emphasis on problem identification, assessment, solution, & decision making.	Fac: WH Matthews U
c33	CivEng 1.83: Law & the Social Control of Science & Technology. Social controls on applications of sci. & tech.	Fac: MS Baram G
c34	CivEng 1.84: Environmental Management: Concepts, Issues, & Processes. Management of man's activities as they relate to environment; rational management of natural ecosystems & resources. Examines various environmental impact assessment methodologies.	Fac: WH Matthews G
c35	CivEng 1.88: Ecological Analysis of Environmental Problems. Application of ecological theory & principles to development of methods for assessment of environmental impacts.	Fac: SF Moore G
c36	CivEng 1.148: Decision Theories & Social Realities in Engineering Planning. Exploration of roles of professionals in reaching decisions about large-scale technological projects with signficant societal impacts.	G
c37	CivEng 1.811: Environmental Law: Pollution Control. Review & analysis of common law, legislation, & regulation for pollution control.	Fac: MS Baram G
c38	CivEng 1.812: Environmental Law: Land & Resource Management. Common law, constitutional law, legislation, & regulation for land & resource management, & the siting of major facilities. Energy, housing, & transportation projects.	Fac: MS Baram G

c39	Hum 21.019: Culture & Society in America: the Rise of a Technological Civilization. Historical discussion of technological society in US. Use of novels, films, original historical documents, & exemplary historical studies on specific topics.	Fac: U	MB Folsom
c40	Hum 21.020: Culture & Society in America: the Technological Society. Analysis of contemporary America as technological civilization. Impact of tech. on culture & politics, social structure, institutions, community, family, individual, & freedom in America. Alternative futures.	Fac: U	staff
c41	Hum 21.022: Myth, Legend, & Science: the Dilemma of the Black Bourgeoisie. Study of late 19th & early 20th C during which American scientific establishment provided substantial proof of innate inferiority of darker races. Effort to achieve synthesis which accepts validity of sci. & myth & rejects spurious & ethnocentric in both.	Fac: U	P Bontemps
c42	Hum 21.371: Traditions of Science in Literature. Study of popular images of sci. & the scientist/engineer in major literatures of the West, inquiring from literary side into social, historical, philosophical, & psychological origins of hostilities between the "Two Cultures."	Fac: U	MB Folsom
c43	Hum 21.961: Seminar on Technology & Society: the Future. Attempt to foresee future through literature, sci. fiction, metabiology, futurology, & social philosophy & to explore how these visions influence action & belief.	Fac: U	RW Wertz
c44	Hum 21.963: Technology, Values, & Social Choice. Engineering, economic, psychological, & ethical problems of optimizing design of technological systems.	U	
c45	Hum 21.964: Technology, Power, & Values. Systematic development of tech. as characteristic of western society over last 5 centuries.	Fac: U	Trilling-Aero&Astro

c46	Mgmt 15.353: Seminar on Management of Technology. Problems of current research in management of sci. & tech.	Fac: EB Roberts HarvardBusinessSch Tech Mgmt Group G
c47	Metallurgy&MatSci 3.80J: Comparative Ancient Technologies. Study of technological systems of ancient, complex societies. Extent to which techs. independent of societal settings; nature of technological change.	Fac: HN Lechtman U
c48	NuclEng 22.37: Environmental Impact of Power Production. Assessment of various environmental impacts of producing thermal & electric power with currently available tech.	Fac: MW Golay G
c49	NuclEng 22.80: National Socio-Technological Problems & Responses. Large socio-technological problems & our capabilities regarding them, in ways beyond discipline-oriented research.	Fac: DJ Rose G
c50	PolSci 17.875: Field Seminar in Science & Public Policy. Comprehensive review of sci. & public policy field.	Fac: staff G
c51	Psych 9.05: Psychotechnology: Scientific & Ethical Issues in Behavior Control. Development & deployment of psychotech. traced by considering case studies drawn from contemporary social problem areas. Questions that bridge traditional gaps between sci., tech., & social policy planning.	Fac: SL Choroner U
c52	UrbStud&Plng 11.09: Technology & the City. Impact of tech. on form & function of cities & urban regions. Focus on processes of change; institutional adaptation to technological innovation.	Fac: staff U
c53	UrbStud&Plng 11.549: Technology Assessment in Health Care Delivery. Health care system, particularly interaction between health policy & health tech., from technical & political perspectives. Approaches to tech. assessment developed & applied to case studies.	Fac: TR Willemain U

Colloquia/Lecture Series

1. Field Seminar in Science, Technology & Public Policy: for faculty & graduate students. Arranger: EB Skolnikoff, HM Sapolsky, T Greenwood, & L Winner (STPP).
2. International Problems of Technology: for faculty & researchers. Arranger: EB Skolnikoff, STPP.
3. Arms Control Seminar: for faculty & graduate students. Arranger: J Ruina.
4. Faculty Health Policy Seminar: for faculty. Arranger: HM Sapolsky.
5. Seminar on Communications Policy: for faculty, researchers, students. Arranger: I Pool.
6. Technology Studies Seminar & Colloquia: for MIT community. Arranger: TSP.
7. Technology Studies Discussion: for MIT faculty teaching humanistic courses on sci., tech., & society. Arranger: TSP.
8. Technology & Culture Seminar: for entire MIT community. Arranger: J Crocker, TCS.

Future Plans: TCS plans following seminars/courses for faculty & students: (1) course on Simone Weil (for credit); (2) seminar on Merit & Equality in a Just Society (for faculty only); and (3) Images of the Human, a lecture & discussion series.

1580 MOUNT HOLYOKE COLLEGE
South Hadley, MA 01075

p01 Luce Professorship in Cosmology

c01	Econ/Chem: The Relation of Complex Organizations to the Extension of Scientific Knowledge & Technological Change. Study of scientific administration & the production & diffusion of technological change.	b & ja Fac: J Rapoport, AJ Harrison 1x; U
c02	ID 380f: The Idea of Progress. History of belief in human progress & its stimulus to scientific discovery & philosophic thought as well as its effects in contemporary philosophy, sci., & literature.	b & ja Fac: G Tovey 15x; U
c03	PolSci 345s: International Politics & the Human Environment. Efforts to cope with problems of pollution, resource depletion, etc. through UN & other intnl organizations, through US foreign policy.	Fac: Ott, Engass

c04 Rel 220s: *Ethics & Public Policy.* Focuses on ethics in the public sphere; moral aspects of intnl, ntl, & institutional policy.
Fac: Sohn

1590 NORTH SHORE COMMUNITY COLLEGE
Beverly, MA 01915

Abbreviations: PEHT = Public-Environmental Health Technology

c01 PEHT 81102: *Principles of Public Health II.* Man's involvement in environment; how pollution of environment can affect health. Recent anti-pollution laws--its origins & functions in society.

c02 PEHT 81211: *Public Health Law I.* Purpose, courses, & type of laws that relate to public & environmental health.

1600 NORTHERN ESSEX COMMUNITY COLLEGE
Haverhill, MA 01830

c01 Bio/Phil 5699: *Bioethics.* Ethical implications of problems of population control, resource allocation, & biomedicine.
b & ja
Fac: J Gustafson, W Blanchard

c02 Hist/Sci 6699: *History of Science & Technology.* Historical & philosophical development of sci. & tech. Practical consequences of discovery on history of human activities.
b & ja
Fac: J Osborne, W Blanchard, J Gaurino

c03 Sci 5011: *Man & His Environment.* Study of progressive deterioration of man's balance with nature--how man has had to change psychological attitudes in order to implement & develop new technical solutions.
b & ja
Fac: J Osborne, P Laszlo, A Pollack

1610 ST. JOHN'S SEMINARY COLLEGE
Brighton, MA 02135

c01 Hist 563: *US Social History Since 1865.* Stress on scientific society. Tech. & society.
Fac: Cusack

c02 SE 200: *The City as Theological Locus.* Theological reflection in a technological society.
Fac: McDonnell

c03 SE 202: A Theological Critique of the Modern Utopian, Dysutopian, & Apocalyptic Thought.
Man as viewed by modern sci.
n.s.: Skinner, etc.
Fac: McDonnell

c04 SocSci 566: A Study of Man.
Fac: team-taught by biologist, psychologist, sociologist, & theologian

c05 Theol 103: The Ethical Content of the Professions.
The priest in a technological society.
Fac: O'Donoghue

c06 Theol 204: Ethics & Nuclear Policy.
Includes most recent development in weaponry.
Fac: Hehir

c07 Theol 205: Human Rights.
Rights of the individual in a technological society.
Fac: Hehir

c08 Theol 206: Life & Death in Catholic Thought.
Problem of death & its definition in modern medical tech.
Fac: Hehir

1620 SMITH COLLEGE
Northampton, MA 01060

c01 HistSci 397b: The Scientific Revolution: 1600-1800.
Influence of theology & philosophy on history of sci.
Fac: Burlingame

c02 Rel 352a: Problems in Social Ethics: Medical Ethics.
Fac: Derr

1630 SOUTHEASTERN MASSACHUSETTS UNIVERSITY
North Dartmouth, MA 02747

c01 I 400 (CivEng): Energy Crisis.
Case study in socio-technical problem solving.
Fac: SM Breuning
50s

c02 Phil 318: Bioethics: Ethical Issues Arising from Recent Advances in Medicine & Biology.
Death & dying, behavior control, genetic counseling & genetic engineering, & population limitation.
Frankena; Kubler-Ross; JB Nelson; HCS; r.
Fac: T Wassmer
25s

c03 Phys 161-162: Science, Technology & Society.
Central scientific idea--nuclear power, evolution, nature of light, etc.--explored in terms of technological applications & social implications.

Schroeer
Fac: JJ Russell
445s

c04 PolSci 391: Seminar on Ecological Problems & Policies.

1640 TUFTS UNIVERSITY
Medford, MA 02155

Program in International Energy Resources & the Human Environment (PIER)
p01 Urban Social & Environmental Policy (USEP)

c01 Dipl 207: Science, Technology & American Foreign Policy.
Relation of sci. & tech. to key issues of foreign policy & intnl affairs.

Fac: R Pfaltzgraff
PIER

c02 Econ 241: Introduction to International Energy Problems.
Identification of problems & analysis of specific policies aimed at alleviating them.

b & ja
Fac: R Mancke, E Klema
PIER
1x; 10s; G

c03 Econ 244: World Environment: Problems & Alternatives.
World's major energy-related environmental problems, their economic & technological causes, & policy for alleviating them.

ja
Fac: R Mancke
PIER
1x; 12s; G

c04 Econ 245: Energy Problems & Methods of Solution.
Introduction to 2 conventional methods of solving important energy-related problems.

PIER

c05 Law 207: Seminar on Environmental Problems & International Law.
Intnl impact of pollution & spoilation; traditional legal controls.

ja
Fac: A Rubin
PIER
2x; 8s; G

c06 Law 225: Legal Aspects of Energy & Other Resources.
Evolution of legal & institutional arrangements between less developed countries & public & private investors from capital exporting countries.

ja
Fac: R Meagher
PIER
1x; 20s; G

c07 Pol 237: Technology Transfer to Developing Nations.
Consideration of problems to be solved in areas such as agriculture, medicine, transportation, & sci. as affecting socio-economic & political systems in developing countries.

Fac: E Klema
PIER

c08	Bio 197: Contemporary Bio-Social Problems. Application of basic biological theory to modern social problems.	b & ja Fac: S Slapikoff 13x; 20s; U
c09	CivEng 127: Contemporary Problems & Geotechnical Engineering. Application of geotechnical engineering to solution of contemporary problems such as energy supply & urban mass transit.	ja Fac: L Edgers
c10	EngDes 160: Introduction to Human Factors in System Design. Basic considerations, relationships, & interactions concerned with man, his environment, his skills, & other men.	ja Fac: J Kreifeldt 5x; 18s; U, G
c11	EngSci 11: Technology as Culture. Tech. as cultural manifestation of all human societies.	De Nevers; Wiser & Wiser. Fac: M Sussman 3x; 33s
c12	EngSci 22: Technology Assessment. Efficienct management of resources in view of increasing gap between our aspirations & what we can afford.	Fac: E Klema
c13	Hist 62: Science & Civilization. Social & intellectual impact of sci. & tech. during 19th & 20th C.	ja Fac: C McMillan 3x; 18s
c14	Phil 124: Ethical Issues in Medical Science.	Fac: H Bedau, N Daniels
c15	Phys 5-6: Physics for Humanists. Constructive & destructive interaction between sci. & society.	b & ja Fac: J Tessman 6x; 110s; U
c16	PolSci 117: Environmental Planning & Design. Interrelationships between planned & designed physical environment & its ecological, social, & behavioral parameters.	Fac: H Field

1650 UNIVERSITY OF MASSACHUSETTS
Amherst, MA 01002

Center for Environmental Policy Studies (CEPS)
p01 Global Survival Freshman Year Program (GSFYP)
Institute for Man & Environment (IME)

Abbreviations: FS = Future Studies

c01	GSFYP 190A: Introduction to Global Survival. Lectures providing overview of global survival.	
c02	GSFYP 190B: Seminar in Global Survival. Relationships between various elements & issues of global survival.	
c03	GSFYP 190C: Topics in Global Survival. Modules which concentrate on specific area or issue of interest. Topics have included energy crisis, individual & ethical dilemmas, no-growth society, & arms race.	
c04	Bot 190: Special Topics--Science & Human Values.	Fac: Shapiro
c05	CivEng 365: Environmental Institutions & Policies. Public policies & laws relating to use & conservation of water resources.	
c06	Comp&InfoSci 102: Computers & Society. Use of computers to solve social problems.	Fac: M Arbib
c07	Engl 161: Nature & Literature. Literature that deals with man's relationship to environment. Changing conception of nature.	Fac: Ashton, Kinney
c08	FS: Introduction to Future Studies. Concepts of futuristics, theory & techniques of long-range forecasting, views of noted futurists, implication for educational policy.	
c09	FS: The Future & the No-Growth Society. Philosophies & broad implications of no-growth in population, economics, & resources.	
c10	Honors 391: Contemporary Problems in Science & Medicine. Bioethical problems from holistic perspective. Issues analyzed from historical development, ethical & moral implications, & major legal arguments.	f; b & ja; Wertz. Fac: GJ Armelagos, WF Bahou, ID Singer
c11	Mech&AeroEng 200: Technology & Society. History of tech., criticisms of modern tech., technological change & assessment.	

c12 Phil 290m: Ethics & Medicine. Fac: Parsons

c13 Phys 117: Nuclear Energy, Its Physics & Its Social Challenge. Fac: Inglis
Basic physical concepts & associated social, political, & diplomatic problems & challenges of nuclear reactors & explosives.

c14 Phys 123B: Problems in Physics--Wind Power. Fac: Cook

c15 Phys 123C: Problems in Physics--Strategic Arms. Fac: Guyer

c16 PolSci 326: Politics of Environmental Policy. Fac: Shanley

c17 PolSci 391B: Public Policy for Science & Technology. Fac: Eagan

Colloquia/Lecture Series

1. GSFYP offers various special programs, from individual lectures to symposia & weekend workshops. These are generally organized around a single theme.

1660 WELLESLEY COLLEGE
Wellesley, MA 02181

c01 Chem 102: Contemporary Problems in Chemistry. Fac: Kahl
Topic: energy.

c02 Chem 306: Seminar. Fac: Loehlin
Topic: energy.

c03 Econ 249: Seminar. Fac: Goldman
Topic: The Economics of Environmental Disruption. Is economic growth possible without environmental deterioration.

c04 Extradept 102: Science & Reality. Fac: Chaplin
Problem of understanding what sci. can tell us about nature of reality & knowledge.

c05 Extradept 218: History of Science I. Fac: Webster
Major scientific ideas leading to scientific revolution of 17th C. Contributions of Ptolemy, Copernicus, Kepler, Galileo, Newton.

c06 Extradept 219: History of Science II.
Major scientific ideas emerging in 18th, 19th, & 20th C. Contributions of Lavoisier, Priestley, Lyell, Darwin, Mendel, Einstein.

c07	Phil 217: Philosophy of Science.	Fac: Putnam
c08	Phil 249: Medical Ethics. Topics include psychosurgery, gender-surgery, genetic screening, amniocentesis, euthanasia.	Fac: Menkiti

1670 WESTERN NEW ENGLAND COLLEGE
Springfield, MA 01119

c01	Eng 301: Technology in Society. Interrelationships of tech. & man, his organizations, his environment.	Kast & Rosenzweig; Douglas (1971).
c02	Eng 302: Human Factors in Design. Impact of human factors on complex man-machine systems. Physiological & psychological factors affecting efficient use of equipment designed for human use/control.	McCormick Fac: AH Jacobs

1680 WESTERN NEW ENGLAND COLLEGE SCHOOL OF LAW
Springfield, MA 01119

c01	Law 87: Legal Medicine. Introduction to traumatic medicine to provide background of medical knowledge & applied legal skills which enable lawyer to deal with medical issues in medicolegal cases.	Curran & Shapiro Fac: Curran
c02	Law 91: Environmental Law. Legal techniques available, common law & statutory, for private & public control of natural resources. Comparison of legal remedies with technological advances & political factors.	Gray; Meyers & Tarlock (1971).
c03	Law: Environmental Enforcement. Existing public processes & structures within which environmental protection decisions are made; the influences that operate on those processes, structures, & decisions.	

1690 WESTFIELD STATE COLLEGE
Westfield, MA 01085

c01	Bio 240: Drama of Man & Nature. Develops perspective with which to examine man's place in nature.	Majumder; VR Potter; ja. Fac: SK Majumder 2x; U
c02	Phil: Philosophy of Science.	Fac: G Tetrault

1700 WILLIAMS COLLEGE
Williamstown, MA 01267

c01	Art 201: Environmental Planning & Design. Problems in understanding & criticism of environmental planning & design, including effects of social & technological change.	Fac: Satterthwaite
c02	Astron 326: Astronomy & Society. Value & relation of basic research to society in general, with special reference to astronomy.	Fac: Pasachoff
c03	Chem 100F: The Chemical Point of View: A Scientific Approach to Contemporary Problems. Principles of chemistry & scientific method fundamental to understanding of current topics in biochemistry, medicine, & tech.	Fac: Scroggin
c04	EnvStud 403: Man & the Environment. Evolutionary & ecological processes as they relate to man & their implications for contemporary society; emphasis on future.	Fac: Jorling
c05	Hist 345: Man & Nature in America. Historical approach to American environment & man's attitudes toward it--17th C to present.	Fac: Labaree
c06	HistSci 201: Ideas of Science: Order, Cause, & Chance. Comparative study of ideas & methods which formed scientific revolution of 17th C & led to major transformation of western culture.	Fac: Beaver U
c07	HistSci 204: History of Science & Technology in America. Developments in sci. & scientific activity which have led to America's present position as world power in sci.	Fac: Beaver U
c08	HistSci 206: Scientific Origins of the Modern World View. Development, use, & implications of fundamental concepts of major scientific revolutions from Galileo to Einstein. Extent to which sci. is creator of sensibilities & values of modern world.	Fac: Beaver U
c09	HistSci 232: Computers & Society. Uses, history, & impact on social values of computers.	Fac: Beaver, Wright

c10 HistSci 303: The Role of Science in Advanced Industrial Societies. Dependence of modern societies on scientific knowledge & tech. & problems engendered by this dependence.
Fac: Beaver

c11 HistSci 350: Problems in the Recent History of Science. Impact of advances in one scientific field upon another; extra-scientific implications of recent work in the scis.
Fac: Beaver

c12 Phil 340: Philosophy & the Human Sciences. Major developments in the philosophical analysis of human action since WWII in relation to trends in human scis.
n.s.: Kenny, Peters, Harre, Merleau-Ponty, Schutz, Natanson.
Fac: O'Connor

c13 Phys 220F: Energy & the Environment. Fundamental & practical scientific realities which are essential inputs into broader question of overall societal energy policy.
Fac: Shelton

c14 PolSci 340: Environmental Law. Opportunities & limitations of law in resolving & establishing environmental related public policy.
Fac: Jorling

1710 WORCESTER POLYTECHNIC INSTITUTE
Worcester, MA 01609

Faculty Enrichment--The Sloan Summer Program
Humanities & Technology Program
Interactive Qualifying Project & Center

Abbreviations: SSPS = Department of Social Science & Policy Studies

c01 SSPS: A Social Psychological Perspective on National Problem Solving.
Fac: L Goodwin

c02 SSPS: Social Research & Social Problem Solving.
Fac: L Goodwin

1720 WORCESTER STATE COLLEGE
Worcester, MA 01602

c01 Bio 101: Social Biology. Social implications of medicine, behavior, genetics, population, environment, & evolution with emphasis on role of biology.
Rosenfeld; Wallace.
Fac: staff

c02 Bio 102: Diseases & Mankind.
Effects of disease on economics, social life, law, history, religion, philosophy, sci., art, literature, & music.
Cartwright; Dubos (1959); Roueche.
Fac: staff

c03 ID 300-301: Evolution of Arts & Ideas.
Developing understanding of whole of civilization while probing its meaning as expressed through various media, literature, sci., math, etc.
b
Fac: staff

c04 NatSci 106: Science & Society.
Impact of sci. on man's interpretations of natural world, social activities such as economics & war, & the "humanistic" disciplines.
Schroeer; Newton; Fischer.
Fac: staff of Phys

c05 NatSci 107: Physics of Urban & Environmental Problems.
Motion & use of energy sources in context of several urban & environmental problems.
Priest; Novick.
Fac: staff of Phys

c06 Phil 300: Philosophy of Nature & Science.
Concepts & methods of empirical & natural scis. & their development as elements of human culture.
Van Melsen; Aquinas; Ellul (1964); Mumford (1934; 1966).
Fac: staff

MICHIGAN

1730 ALBION COLLEGE
Albion, MI 49224

c01 Phys: Contemporary Physics.
Presents scientific attitudes & opinions along with survey of topics such as relativity & quantum mechanics. Physics as an attitude rather than collection of facts.
Fac: EL Ferretti, MA Ludington
U

1740 DELTA COLLEGE
University Center, MI 48710

c01 Sci: Chemistry & the World.
Impact of chemistry on world: pollution & environment, power generation, population, drugs.
Fac: C Most

1750 GRAND RAPIDS JUNIOR COLLEGE
Grand Rapids, MI 49502

c01 Hist 101: Journey to the Contemporary World. Basic movements which have influenced development of western world to 20th C. Sci. & society integral part of course.
Fac: J Van Aartsen

c02 Hist 102: Contemporary World. Continuation of 101.
Fac: J Van Aartsen

1760 HENRY FORD COMMUNITY COLLEGE
Dearborn, MI 48128

c01 Ecol 30: Science, Technology, & Society. Biological, chemical, geographical, sociological, economic, & political sci. aspects of two selected areas of concern in US.
de Bell; Commoner; Turk, Turk, Wittes, & Wittes (1972).
Fac: W Cravens-Geog
T Shellberg-Bio.
JW Smith-PolSci
S Strom-Soc
120s

1770 MICHIGAN STATE UNIVERSITY
East Lansing, MI 48824

p01 Group for the Analysis & Assessment of Technology
p02 Lyman Briggs College (LBC)

Abbreviations: JMC = Justin Morrill College
HD = Human Development

c01 LBC 290E: Science, Values & Public Policy. Case studies of world food problem & health care delivery using tech. assessment framework.
Committee for Economic Development; Fuchs; ja.
Fac: R Snow, E Wicks
1x; 15s; U

c02 LBC/Phil 361: Philosophy of Technology. Study of major positions on relationship of tech. to sci. & both to human values. Cultural significance of modern tech. & its social forms.
M Brown; Roszak; Mumford (1970); Castenada; ja.
Fac: P Shepard
8x; 35s; U

c03 LBC 374: Historical Problems in the Biological Sciences. Interaction of sci. with intellectual culture & social thought; development of Darwinism, eugenics, scientific racism, current controversies.
Eiseley (1961); Ziman; Watson; ja.
Fac: R Snow
8x; 35s; U

c04	LBC 376: Historical Problems in Technical Change. Technical change as interlocking process involving technical systems, supporting systems, & the values which move individuals & groups as they attempt to modify their environments by use of tech.	b & ja Fac: R Snow 8x; 25s; U
c05	LBC 377: The Natural Environment: Perceptions & Practices. Historical study of relationships linking new perceptions of natural environment, changes in public attitudes, & new patterns of public & private actions.	Nash; Conron. Fac: R Snow 1x; 15s; U
c06	LBC 378: Popular Culture & Technical Change in America: 1800-Present. Study, using materials of popular culture, of ways in which technical change affects culture & ways in which cultural mythology, values, & ideas channel, modify, or inhibit technical change.	Boorstin; Nye; ja. Fac: D Wright 1x; 45s; U
c07	LBC 491-492: Senior Seminar I & II. Current topics relating sci. or tech. to social or cultural issues.	Fac: various faculty members 15s; U
c08	Eng 200: Technology Assessment. Attempt to describe & analyze portions of current tech. & its desired & undesired consequences; exploration of avenues for assessing such consequences for future techs.	b & ja Fac: DJ Montgomery, Eng InstructionalServices NatSci
c09	Eng 401: Technology & Society. Sociotechnical evaluation of impact of proposed techs. on economic, political, & cultural aspects of society.	b Fac: DJ Montgomery
c10	HD: Scientific Concepts of Human Nature & Their Implications to Ethics. Historical & cultural views of human nature & how sci. & tech. influence these views.	Rhinelander; Passmore; ja. Fac: JE Trosko
c11	HD: Human Nature, Human Intervention & Human Development. How various views of human nature influenced social practices of human intervention (medicine, education) & how these, in turn, influenced biological & social development.	Rhinelander; ja. Fac: JE Trosko
c12	JMC: Science, Technology & Human Values. Nature of sci., tech., & human values & their relationship to nature of human nature.	VR Potter; ja. Fac: JE Trosko

Future Plans: (1) tech. assessment & sci., tech., & society as topics for continuing seminar, & as subjects for M.S. & Ph.D. theses, as emphasis for topic in traditional engineering & sci. fields, & as basis for new graduate programs in sci., tech., & society & tech. assessment in conjunction with College of Business & other colleges; (2) most of Science Studies (LBC) courses will probably become available to any student at university as general education electives.

1780 UNIVERSITY OF DETROIT
Detroit, MI 48221

c01 EnvStud 110-120-130-140: Environmental Studies Series.
Social, economic, technological, & physical aspects of environment.
Fac: staff
3x; 10s; U

c02 Hist 454: Technological America in the 20th Century.
Impact of technological development on American way of life. Implications of continued technological development.
Fac: staff
1x; 20s; U

c03 Phil 321: Philosophy & Ecology.
Values & philosophies involved in ecological problems.
Whitehead (1925)
Fac: Wallenmaier
2x; 25s; U

c04 Phil 323: Science & Human Values.
Social context of sci.; metaphysical & methodological approach to sci.
Fac: staff
3x; 20s; U

c05 Phil 418: Technology & Society.
Nature of development of tech. & impact on society.
Fac: Wallenmaier
2x; 15s; U

c06 Phil 474: Philosophy of Science.
Includes study of social aspects of sci. & relation to value judgments.
Fac: Venkateswaran
3x; 25s; U

c07 PolSci 237-474-534-536.
Series of courses in urban politics with emphasis on social, economic, & technological problems.
Fac: Tai
Srs, G

c08 RelStud 284: Death & Dying in a Technological Age.
Ethical problems created by new methods of prolonging life. Death & dying process.
Fac: M Maxey
2x; 80s; U

c09 RelStud 558: Bioethics & the Future of Man.
Ethical problems from recent developments in genetics & reproductive tech., research in gerontology & thanatology, etc.
Fac: Venkateswaran
2x; 40s; G

Future Plans: currently developing model curriculum in area of sci., tech., & society; planning series of colloquia & lectures in this area designed for cross-disciplinary instruction.

1790 UNIVERSITY OF MICHIGAN
Ann Arbor, MI 48104

p01 Center for Research on Utilization of Scientific Knowledge (CRUSK)
Program in Engineering for Public Systems (PEPS)

Abbreviations: IPPS = Institute of Public Policy Studies

c01 ArchUrbPlng 600: Ethical & Social Problems of Urban Planning. Fac: D Cason

c02 Eng 195: ABC&D of Nuclear Engineering in Modern Society. Fac: Kikuchi & guest lecturers
Planning for Michigan electrical energy needs in near & intermediate future; based on safety & environmental analyses used for nuclear tech.

c03 Eng 380: Societal Systems. Fac: JC Mathes, K Chen

c04 Eng 391: Problems in Technology & Society, 1750 to the Present. Fac: Wright

c05 Eng/Geog 458: Assessment of Environmental Impact. Fac: DH Gary, T Detwyler
Methodologies for impact assessment; Ntl Environmental Policy Act; review & critiques of impact statements filed by government agencies.

c06 Eng 490: Values, Epistemology, & Policy. Fac: K Chen

c07 Eng 503: Social Decision Making I. Fac: K Chen

c08 Eng/IPPS 590: Energy Policy Seminar. b & ja
Fac: W Vivian, M Cohen

c09 Eng 611: Values & Policies. b & ja
Fac: K Chen

c10 Eng 640: Electrical Systems for Future Societies. b & ja
Fac: K Chen, M Enns

c11 EnvStud 353/Phys 250: Energy & Environment. Fac: M Ross

c12 Geog 200: Environmental Systems Under Stress. Fac: T Detwyler
Shows connectivity & feedback between various environmental elements; stresses on man-modified ecosystems.

c13	Geog 300: Low Energy Living.	Fac: T Detwyler
c14	Geog 350: Introduction to Social Science Epistemology. Comparison between scientific & practical reasoning, structure of language, concept of time, nature of human action, & issues of moral & legal responsibility.	Fac: G Olson
c15	Geog 554: Seminar on Survival-Plus. Examination of equilibrium modes of living that are desirable & realizable; consideration of ecological, energetic, technological, social, & political aspects.	Fac: T Detwyler
c16	Hum 239-002/Eng 388: Quest for Utopia. Survey of attempts to design utopias & 20th C reaction against utopianism. Political & psychological assumptions underlying utopian models.	Plato (1968); Skinner (1948); More; K Marx & F Engels (1969); W Morris; Wells; Freud; Zamiatin; Huxley (1968); Vonnegut (1971); Bellamy. Fac: Beauchamp
c17	Hum/Eng 380: Macro Societal Systems Engineering. Social planning--devising & implementing policies to impose limits to growth & to control impacts on environment.	Chen, Lagler, Gray, Mathes, Pollock, et al. Fac: JC Mathes, K Chen guest lecturers
c18	Hum 403: Philosophy of Technology. Tech. as social force, cognitive phenomenon, & ideology. Significance of tech. in making & breaking western civilization.	n.s.: J Ellul, B Fuller, P Soleri. Fac: H Skolimowski
c19	Hum 418/UnivCourse/PolSci 488: Alternative Futures. Human relations in highly developed technological society & possible alternatives to such societies.	Fac: H Solimowski
c20	NatRes 376: Mass Media & the Environment. The design of environmental persuasion campaigns.	Fac: P Sandman
c21	NatRes 476: Writing About Environment. Communication skills necessary for effective management of natural resources--newsletters, pamphlets, press releases.	Fac: P Sandman
c22	NatRes 569/Psych 868: View of Human Nature & the Directions of Social Change. Connections between what members of society believe/know about human nature & directions of social change. Kinds of social change alternate views of human nature encourage.	Fac: D Michael

c23	Phil 362: Science & Society.	Fac: E Jobe
c24	Phys 250/Env 353: Energy, Entropy & the Environment. Concepts of energy & entropy as basis for discussion of pollution, scarcity of resources, possible technological catastrophe, & man's future.	Fac: Randall
c25	Psych 869/NatRes 610: Future Society Planning.	Fac: DN Michael
c26	Psych/Soc 988: The Uses of Social Science in Public Policy Issues.	Fac: SD Nelson
c27	ResCollNatSci 489: Communicating Science. Goals of sci. communication, problems confronted, & skills for achieving public understanding.	

1800 UNIVERSITY OF MICHIGAN MEDICAL SCHOOL
Ann Arbor, MI 48104

p01 Program in Health & Human Values (HHV)

c01	HHV. Lectures, problem solving, & case study conferences in existing pre-clinical & clinical courses.	† Fac: D Burke, Director Nursing, PostgradMed, Allied Health

Colloquia/Lecture Series

1. Bioethics Lecture Series: for general public, with special attention & sometimes assignment to students in schools associated with health scis. Arranger: CK Davis, Assoc. VP for Academic Affairs.

Future Plans: Incorporation & possible expansion of HHV into curriculum in a manner yet to be determined; possible development of bioethics lecture series as interdisciplinary series (beyond Health Scis. Division), as smaller informal seminar programs, or as expansion of HHV.

1810 WAYNE STATE UNIVERSITY
Detroit, MI 48202

c01	PolSci: Science, Technology, & Politics.	Teich; Wertz; r. Fac: MS Frankel 50s
c02	PolSci: Public Management of Science & Technology. Social & political mechanisms for controlling sci. & tech.	Slater (1970); DH Davis; Michael; r. Fac: MS Frankel 15-20s

1820 WESTERN MICHIGAN UNIVERSITY
Kalamazoo, MI 49008

c01	GS 133: Issues in Social Biology. Recent advances in biology & their social & ethical implications.	Leach; Wallace; Crichton (1971b); Volpe (1971); Augenstein; ja. Fac: S Bach, R Flaspohler, R Young, staff & invited speakers 6x; 30s
c02	GS 433: Science, Technology, & Society. Scientific & technological impacts on contemporary society.	Jackson; Burke; Commoner; Meadows, et al. Fac: R Bennett, P Larsen, D Hargreave 6x; 25s
c03	GS 434: Biomedical Ethics & Society.	Wertz; ja; HCS; HCR. Fac: S Bach 2x; 25s
c04	Geog 206: Atmospheric Environment & Man. Role of atmosphere in affecting lives & activities of people; inadvertent modification of atmosphere by man; weather control & air pollution.	Maunder Fac: R Erhart, V Eichenlaub 5x
c05	IndustEng 640: Introduction to Technology. Development, role, philosophy, social responsibility, & current trends in tech.	Layton, Jr. Fac: G Kohrman, G Johnson, R Klein 20s; G

MINNESOTA

1830 CARLETON COLLEGE
Northfield, MN 55057

p01 Program in Science, Ethics & Public Policy (Coll)

c01	Coll 61: Technology & Human Values. Impact of tech. on man; philosophical critiques of tech.; ethical issues in tech. policy; normative criteria for tech. assessment.	Teich; Taviss; Ferkiss (1969); r. Fac: I Barbour, R Elveton, G Kimble, R Shoger 2x; 18s
c02	Coll 62: Environmental Ethics. Attitudes toward nature in western thought, American history & literature, & contemporary ecology. Priorities & assumptions influencing environmental policy.	Barbour (1973); Nash; Southwick; b & ja; r. Fac: I Barbour, C Clark, P Jensen 3x; 20s

c03	Coll 63: Scientists & Government. Relationship between scientists & US government since WWII; scientific advice to Congress & White House; role of experts in democracy; concepts of public interest sci.	Jungk; Greenberg; Primack & von Hippel; ja. Fac: B Casper, N Vig Ix; 20s
c04	Coll 64: Energy Policy. Current/projected energy resources; economic, environmental, & social consequences of alternative energy policies.	b; r. Fac: J Finholt, T Pender 2x; 20s
c05	Coll 65: The Limits to Growth Debate. Global resources in relation to economic growth & population; environmental, economic, & social implications of policies of growth, no-growth, & selective growth.	Meadows, et al.; Cole, et al.; Olson & Landsberg; Park & Park; Mesarovic & Pestel; r. Fac: I Barbour, E Henrickson, R Will 20s
c06	Coll 66: Biomedical Ethics.	Fac: staff

1840 UNIVERSITY OF MINNESOTA
Minneapolis, MN 55455

Social Sciences for Engineers

Abbreviations: HST = History of Science & Technology

c01	HST: Technology & Western Civilization.	Fac: ET Layton U
c02	HST: Physics & Society in 20th Century America.	Fac: RH Stuewer U, G
c03	IT 3301: Energy, Power, Society. Various energy sources & their long range impact on society.	b & ja Fac: staff
c04	IT 3311: Public Issues: Nuclear Power. Pros & cons of nuclear power for future.	ja Fac: H Isbin & invited speakers
c05	IT 5931: Engineering for New Priorities. Design of engineering systems under social, environmental, & political constraints.	b & ja Fac: JE Anderson
c06	PubAffrs 5611-5612: Technology Planning. Planning for large-scale technological projects in conjunction with social & human values.	ja Fac: D Abrahamson & staff
c07	SocSci 3XXX: Knowledge & Power. Comparison of methodologies in tech. & social scis.	ja Fac: K Nier

c08 SocSci 3402: Ecology, Technology, & Society.
Impact of technological innovations on human environment.
ja
Fac: staff

Colloquia/Lecture Series

1. Faculty retreats to discuss interaction of social scis. & tech.: for faculty. Arranger: KSP Kumar.
2. History of Science & Technology: approximately 10 colloquia/yr. For scientists & engineers. Arranger: RH Stuewer.

Future Plans: joint graduate degree program between Engineering & Public Affairs.

MISSISSIPPI

1850 MISSISSIPPI STATE UNIVERSITY
Mississippi State, MS 39762

c01 GenlEng 4013/6013: Technology & Society.
Historical development of tech.; influence of tech.; technological threats to society; possible courses of action; implications for Mississippi.
b & ja
Fac: G Bennett
3x; 6s

MISSOURI

1860 FONTBONNE COLLEGE
St. Louis, MO 63105

c01 SocSci: Futurology.
b & ja
Fac: J Burks

1870 MERAMEL COMMUNITY COLLEGE
Kirkwood, MO 63122

c01 Ascent of Man.
Bronowski (1974)
Fac: B Checkley

1880 NORTHEAST MISSOURI STATE UNIVERSITY
Kirksville, MO 63501

c01 Sci 247-248-249-250: Science Seminar.
Weekly seminars in sci. & tech. & their impact on society.
Fac: staff, invited speakers, students

1890 ST. LOUIS UNIVERSITY
St. Louis, MO 63103

p01 Institute for Theological Encounter with Science & Technology (ITEST)
p02 Man, Technology & Society (MTS)

Abbreviations: ES = Institute of Environmental Studies
IAG = Institute for Applied Gerontology

c01	MTS 10: Problems of Man & Technology: Cultural & Historical Perspectives. Assessment of impact of technological developments on human values through study of tech. in different eras & cultures.	b & ja Fac: F Dobney-Hist R DiLorenzo-Engl Hist, Engl 1x; 20s
c02	MTS 20: Contemporary Perspective. Contemporary issues in tech.; emphasis on developments in life scis.	b & ja Fac: M Warford-TheolStud S Dina-Bio TheolStud, Bio 1x; 30s
c03	MTS 30: Problems of Man & Technology: Moral & Political Perspectives. Value questions relating to impact of tech. on issues of freedom & authority.	b & ja Fac: S Puro-PolSci V Punzo-Phil PolSci, Phil
c04	Chem 10: Chemistry & Society. Chemical environment & its effect on human culture.	Fac: LJ Malone-Chem MTS 4x; 20s
c05	Comm 158: Communication & Society. Basic communication theory & development of philosophy of critical evaluation of mass media & its impact on individual & society.	Fac: R Johnston MTS
c06	Engl 181: The Return to Nature & the Self: Studies in the Romantic-Transcendal British-American Literature of the 19th Century.	n.s.: Burns, Blake, Wordsworth, Coleridge, Arnold, Hopkins, Hardy, Emerson, Thoreau, Hawthorne, Irving, Cooper, Whitman, Twain. Fac: L Fournier MTS, ES 2x; 20s
c07	Math 4: Computers & the Future of Man. Present & potential effect of computer on individual & society.	Fac: R Freese MTS 3x; 20s
c08	SocWork 161: Perspectives in Gerontology.	Fac: I Erlich & others MTS, IAG 4x; 20s

c09 Soc 170: Sociology of the Future.
Analysis of projection models & study of possible futures for human society.

b & ja
Fac: C Mihanovich
MTS
4x; 30s

c10 Theol 101a: Theology of the Environment, Human Manipulation & Confrontation.
Religious/ethical evaluation of 3 environments of human life: natural, corporeal, social; specific consideration of impact of tech.

b & ja
Fac: D Thomas
MTS, ES
5x; 60s

Colloquia/Lecture Series

1. 2 weekend conferences on selected themes relating to relation between religion & sci./tech.: for invited intnl scholars, members of ITEST, faculty, students. Arranger: R Brungs, ITEST.

Future Plans: development of interdisciplinary program for study of tech. Program will be centered in Humanities, but will include Social Scis., Law, Medicine, & Business. Approximately 60 faculty members have expressed interest in participating in the project.

1900 TARKIO COLLEGE
Tarkio, MO 64491

c01 DivSci&Math: Population Bomb & Related Problems.
Impact of population explosion on probabilities of continued existence, quality of that existence, & interrelated environmental crises.

b
Fac: HL Blewitt
5x; 15-25s

1910 UNIVERSITY OF MISSOURI--KANSAS CITY, SCHOOL OF MEDICINE
Kansas City, MO 64108

c01 Behavioral & Social Sciences in Clinical Medicine.
Medical ethics; social change; relation between tech. & scientific concepts/health care delivery.

r; av.
Fac: staff from various departments, invited speakers

1920 UNIVERSITY OF MISSOURI--ROLLA
Rolla, MO 65401

p01 Social Factors in Technology Program

c01 Econ 345: Energy as a Natural Resource.
Society's material welfare as input of available supply of energy, social costs of energy alternatives, & changes in life styles. Foreign policy alternatives in case of scarce supply of energy resources.

ja
Fac: V Rao

c02 Hist 270: History of Technology.
Man's technological achievements in agriculture, building & construction, communication, transportation, power sources, metallurgy, & production of human needs.
Fac: H Eisenman

c03 Hist 275-276: History of Science I & II.
Leading conceptual developments within sci. Role sci. has played in man's intellectual life & in society.

c04 Soc 258: Biosociology.
Health & illness behavior & relationships of biological & social aspects of adaptation to environment.
Fac: EH Epstein

1930 WASHINGTON UNIVERSITY
St. Louis, MO 63130

p01 Center for the Biology of Natural Systems (CBNS)
p02 Technology & Human Affairs (THA)/Center for Development Technology (CDT)

c01 THA 141: Technology, Survival, & the Year 2000.
Prospects for food, energy, etc. Introduction to futures research.
b & ja
Fac: RP Morgan
2x; 40s

c02 THA 252: Technology, Values & Society.
Ethical & philosophical issues governing scientists, engineers, & technological development.
b & ja
Fac: R Buchdahl
3x; 10s

c03 THA 261: Contemporary Technology I: Energy & Human Affairs.
Energy tech. & policy.
b & ja
Fac: CT Hill, RP Morgan
3x; 25s

c04 THA 262: Contemporary Technology II: Pollution & Environmental Impact.
Air, water pollution problems; preparation of environmental impact statements.
b & ja
Fac: W Vaughn, B Senturia
3x; 15s

c05 THA 351-352: Projects & Policy Studies.
Independent projects & policy studies.
Fac: staff
5x; U

c06 THA 441: Role & Management of Modern Technology.
Role & management of tech. in universities, industry, & government.
b & ja
Fac: R Buchdahl
U

c07 THA 512: Technology Assessment & Public Policy.
Tech. assessment methodology & applications. Introduction to forecasting & policy studies.
Hetman; b & ja.
Fac: CT Hill
3x; 20s; Srs, G

c08	THA 521: Technology & International Development. Role of tech. in intnl development; tech. transfer; technical assistance.	b & ja Fac: RP Morgan, JPR Falconer 5x; 15s; Srs, G
c09	THA 531: Technology, Resources, & Environment. Impact of tech. on environment. Energy & resources. Global models.	b & ja Fac: CT Hill 3x; 25s; Srs, G
c10	THA 541: Urban & Environmental Dynamics Simulation Laboratory. Computer-assisted simulation games, e.g., River Basin Model, CLUG.	b & ja Fac: GL Esterson 3x; 35s; Srs, G
c11	THA 551: Technology, Communications, & Education. Cable TV, CAI, satellites: their operation, use, potential & impacts in education.	b & ja Fac: RP Morgan 4x; 8s; Srs, G
c12	THA 591: Special Topics in Technology & Human Affairs. Used to spawn new courses. Spring 1975: policy analysis, decision making, & tech.	b & ja Fac: JK Gohagan & staff 3x; 10s; Srs, G
c13	Phys 500: Science & Society. Social impact of sci. & internal organization.	Friedlander; Ziman; Weinberg. Fac: MW Friedlander

Colloquia/Lecture Series

1. THA Seminar: for faculty, graduate students, researchers. Arranger: THA staff.

2. CDT Seminars on Educational Telecommunications: for faculty, researchers, graduate students. Arranger: RP Morgan.

3. CDT Seminars on Earth Observation Applications: for faculty, researchers, graduate students. Arranger: JK Gohagan.

Future Plans: THA Ph.D. program & full departmental status for THA by July 1, 1976.

1940 WEBSTER COLLEGE
Webster Grove, MO 63119

c01	Rel 205: Religion & Human Values. Decision making, personal & public; effect of tech. on values & decision making.	b & ja Fac: G Chamberlain 25s
c02	Biomedical Ethics.	Fac: G Chamberlain-Rel Fuchs-Sci

MONTANA

1950 CARROLL COLLEGE
Helena, MT 59601

c01 Theol 489: Medical Moral issues. — Fac: Peoples

1960 DAWSON COLLEGE
Glendine, MT 59330

c01 Soc 150: Population, Technology & Environment. — Fac: L Lindquist

1970 MONTANA STATE UNIVERSITY
Bozeman, MT 59715

c01 EnvMgmt 260: Technology & Society. — b & ja
Fac: Lang

c02 Govt 353: Science & Public Policy. — Fac: FM Bryan

c03 Hist 430-431-432: History of Science. — Fac: P Mullen

NEBRASKA

1980 CREIGHTON UNIVERSITY
Omaha, NE 68178

p01 Research in Religion & Ethics in Health Care Delivery Problems/Program in Humanities for the Health Sciences (HHS)

Abbreviations:
PMPH = Preventive Medicine & Public Health
PHA = School of Pharmacy
DEC = School of Dentistry
IM = Department of Internal Medicine

c01 PHA 112: Pharmacy Jurisprudence & Ethics. Problems of law & ethics in dispensing of drugs & handling of patients. — b & ja; Fac: W Tindall, JJ Quinn, guest speakers; HHS

c02 DEC 143: Dental Ethics. — ja; Fac: JJ Quinn, P Wachter, D Hoover, P Maschka

c03 Eth 161: Medical Ethics. Research into 1 of many ethical problems in health care. — Fac: JJ Quinn; Hum-MedSch

c04	IDC 103: Behavioral Sciences. Sexuality & religious beliefs; Hippocratic Oath, AMA Code of Ethics; health & religious beliefs.	ja Fac: JJ Quinn, R Mitchell guest speakers Psychiatry
c05	IDC 123: Clinical Medicine. Ethical, religious, & sociological values concerning: drug addiction, genetic engineering & counseling, abortion, sterilization, etc.	ja Fac: J Lynch, JJ Quinn guest speakers InternalMed
c06	Nurs 140: Maternity Nursing--Ethical Problems.	b & ja Fac: Corboy, JJ Quinn, staff
c07	Nurs 194: Problems & Issues in Nursing. Sociological, ethical, & religious problems facing nurse today.	b & ja Fac: Hansen
c08	Phil 197: Bioethics. Philosophical ethics involved in modern problems which occur in health care delivery.	b & ja Fac: VR Walker
c09	PMPH 101: Epidemiology. Ethical & religious values found in patient care of aged & senile & the alcoholic.	ja Fac: H Guirgis, JJ Quinn guest speakers
c10	Rel 161: Religion & Health. Research into effects religious beliefs have upon patient's health.	Fac: JJ Quinn Hum-MedSch

Colloquia/Lecture Series

1. During the course of 2 yrs., 12 lectures given on medical-moral issues: for junior & senior medical students, house staff, faculty, nursing students & faculty, paramedical personnel. Arranger: JJ Quinn.

1990 KEARNEY STATE COLLEGE
Kearney, NE 68847

c01	Bio 430: Special Topics in Social Implications of Biology.	Fac: staff ix

2000 UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE
Omaha, NE 68105

c01 Although no formal courses exist, a number of faculty are interested in medical ethics, the pathology & philosophy of death & dying, etc. When students express interest in such areas, Office of Academic Affairs works to form group with appropriate faculty to meet specific needs & interests of group.

NEVADA

2010 UNIVERSITY OF NEVADA, RENO
Reno, NV 89507

p01 Committee on the Philosophy of Inquiry (COPI)

Abbreviations: ESB = Environmental Studies Board

c01	Phil/Phys 476/765: Philosophy & Method of the Physical Sciences. Application of Polayni's concept of tacit knowing, Harre's account of model building, & Ziman's view of scientific community to processes of theory formulation & experimental verification.	Bohm; Harre; Polanyi; Ziman; b & ja. Fac: WT Scott COPI U, G
c02	Phil 494/794/Soc 497/797/Anthro 499/799: Philosophy & Method of the Social Sciences. Survey of theories in philosophy of sci. & some theoretical issues & basic concepts of social scis.	Harre; Piaget; Kuhn; GH Mead; K Marx & F Engels (1970); Krantz; b & ja. Fac: A Theophanous Invited speakers COPI U, G
c03	Phil/Zool 494/794: Philosophical Biology. Nature of sci. & application of different views of sci. to biology. Analysis of different models of biology. Ethical questions.	b & ja Fac: A Theophanous et.al. COPI U, G
c04	Phil/Econ: Value Aspects of Social Accounting Systems. Traditional income accounts, efforts to identify & formulate social goals, nature & functions of social indicators, examination of current governmental & nongovernmental reports on social systems in present & future.	b & ja Fac: Roelofs, Atkinson COPI Ucl
c05	Phys: Science & Religion. Study of writings on current problems of sci. & faith.	Barbour (1966); n.s.: Polanyi, Teilhard de Chardin, Buber, Bultmann, Berger, Niebuhr, Tillich, Fromm, Schrodinger, Gilkey. Fac: WT Scott & staff from Rel & Soc COPI U, G
c06	Phys: Introduction to Physics for Humanists.	Schroeer; b & ja. Fac: S Goudsmit U, G, F

c07 HomeEc/ESB: Life Styles & the Environment. b & ja
Personal decisions & modes of behavior which have effects upon environmental problems.

Colloquia/Lecture Series

1. COPI Lunch: for faculty. Arranger: WT Scott.

NEW HAMPSHIRE

2020 KEENE STATE COLLEGE
Keene, NH 03231

c01 Sci 350: Science & Society. Fac: P Nickas
Impact of sci. on man's world view; evaluation of non-scientist's role in society that is increasingly sci. oriented.

2030 PLYMOUTH STATE COLLEGE
Plymouth, NH 03264

c01 NatSci: Science of Humanity. Fac: G Salmons

c02 Phil: Utopias, Dystopias, & Future. Fac: R O'Neill

c03 Summer '75: Energy, Environment, & Politics.
Current ntl & regional problems of energy demand, supply, & distribution, & the environmental issues raised in this context analyzed from political viewpoint.

NEW JERSEY

2040 NEW JERSEY INSTITUTE OF TECHNOLOGY
Newark, NJ 07102

p01 Center for Technology Assessment
Man & Technology

c01 SocSci 506: Technology Assessment. Hetman
Lecture series on impact of tech.
Fac: S Bordman
Org&SocScis
G

c02 SocSci 602: Cost-Benefit Analysis & Economic Decisions.
Lecture & case studies of cost-benefit analysis.
Hinrichs & Taylor
Fac: S Bordman
Org&SocScis
G

c03 SocSci 606: Technology Forecasting.
Techniques & methodologies of forecasting, including Delphi & cross-impact matrices.
b & ja
Fac: J Spector
Org&SocScis
G

2050 PRINCETON UNIVERSITY
Princeton, NJ 08540

p01 Center for Environmental Studies
p02 Program in History & Philosophy of Science (HPS)/Program in Science in Human Affairs (SHA)

Abbreviations: SEAS = School of Engineering & Applied Science
AMS = Aerospace & Mechanical Sciences

c01 SHA 324: Medicine in Modern America.
Introduction to major issues & problems facing American medicine. Includes ethical & legal problems; number & distribution of health personnel; alternative systems of health care delivery.
Fac: GL Geison

c02 CivEng 313: Technology & Society Seminar I: Present & Future Challenges.
Task force teams do in-depth studies of current problems in tech. & society.
Fac: SM Slaby
SHA
40s

c03 CivEng 314: Technology & Society Seminar II: Problems in the Human Environment.
Task force teams do in-depth studies of current problems in tech. & society.
Fac: SM Slaby
SHA
40s

c04 Phys/Geol&GeophysSci 333: Seminar on the Impact of Science on Modern Society: Water Pollution.
Introduction to economic, social, political, legal, scientific, technological aspects of managing terrestrial water environment.
SHA

c05 Phys/Geol&GeophysSci 334: Seminar on the Impact of Science on Modern Society: Air Pollution.
Introduction to economic, social, political, legal, scientific, technological aspects of managing air environment.
SHA

c06 Soc 335: Medicine, Law & Other Professions.
SHA

c07 Soc 356: The Sociology of Science. SHA
Natural & behavioral scis. viewed in social context. Social influences on scientific discovery & productivity; normative & ideological basis of scientific activity; interrelationships among sci., business, government, & education.

c08 Arch 304: Urban Studies: Contemporary Problems of Urban Form.
Main factors behind current urban & environmental problems & their implications. Effects of industrialization, decision making, legal controls.

c09 Eng 303: Environmental Studies: Introduction to Environmental Policy.
Economics, politics, & ethics of environmental problems; how environmental policy or decisions use or misuse this theoretical background. Evaluation of policy alternatives.

c10 Eng 468: Transportation Systems Technology.
Analysis of performance, cost, & social & environmental impacts of modern transportation systems.

c11 Hist 291: The Origins of Modern Science 1500-1750. Fac: MS Mahoney
Scientific Revolution considered as beginnings of modern physical sci. & as emergence of sci. as independent, institutionalized cultural activity.

c12 Hist 392: The Scientific World View of Antiquity & the Middle Ages. Fac: MS Mahoney
Emergence & development of natural philosophy in Ancient Greece; emphasis on interplay of sci. & culture.

c13 Hist 393: Science in the Modern World. Fac: CC Gillispie
Ways in which sci. has become major institution shaping historical development.

c14 Hist 494: Historical Studies in Medicine, Disease, & Society. Fac: T Gelfand
Topics vary from emphasis on the medical task & institutions in a defined society to topics in disease & culture over longer chronological periods.

c15	PA/AMS 520: Introduction to Environmental Problems & Strategies. Analytical methods of social & natural scis. brought to bear on wide range of environmental problems. Energy supply & demand, pollution control programs, role of wilderness conservation.	Fac: Feiveson, RH Socolow
c16	Pol 314: Science, Technology, & Politics. Impact of technological developments on domestic society & politics.	
c17	Pol 317: International Legal Order. Intnl law in matters of war system, population growth, environmental overload, & resource depletion.	
c18	Pol 326: Technology & International Relations.	
c19	Publ&IntnlAffrs 519: Ecological Theory & Public Policy.	G
c20	SEAS 101: Introduction to Technological Challenges. Interaction of technological with political, social, & economic issues.	b & ja Fac: DC Hazen & staff 50s; U
c21	SEAS 102: The Technology-Community Interface: a Game Approach. Gaming simulation of urban environmental problems & their social impact.	b & ja Fac: R Miles & staff 70s
c22	SEAS 213: Energy & Environment: A Quantitative Approach.	Fac: RH Socolow, I Glassman 30s
c23	Soc 348: Sociology of the Future. Current trends & prospects in number of fields & their impact on the emerging future. Fields include tech., biology, demography, resource development, human nature & values, alternative futures.	

Colloquia/Lecture Series

1. Colloquia on Technology & Society: for students in CivEng 313 & 314, interested faculty & students, general public. Arranger: SM Slaby.
2. Transportation Seminar: open to the public. Arranger: PM Lion.
3. Energy Conversion Seminar: open to the public. Arranger: SM Bogdonoff.

2060 RAMAPO COLLEGE OF NEW JERSEY
Mahwah, NJ 07430

p01 Science in Cultural Perspective

c01 Amer 234: Science Fiction as Social Criticism.

c02 Bio 343: Genetics & the Population Explosion.

c03 Hist 321: Marx, Darwin, Freud, & Einstein.

c04 Hist 341: A History of Scientific Ideas.

c05 ID 120: Master Lecture Series Seminar--the Social Environment of Science.

c06 ID 121: Master Lecture Series--Science & Society.

c07 ID 221: Society & the Biomedical Revolution.

c08 ID 223: Technology & Human Values.

c09 ID 226: Man, Nature & Literature.

c10 ID 229: The Impact of Science on Society.

c11 ID 341: Science Fiction.

c12 ID 343: Science & Religion.

c13 ID 345: Technology & Alienation.

c14 Lit 223: Literature & the Environment.

c15 Phil 222: Men, Machines, & Modern Society.

c16 Phil 325: Technology, Society, & Values.

c17 Pol 237: America as a Post-Industrial Society.

c18 Pol 322: The Politics of Energy.

c19 Psych 225: Psychotechnology.

c20 Soc 221: Illness, Medicine, & Society.

c21 Soc 241: Science & Society.

Colloquia/Lecture Series

1. The Master Lecture Series: given each semester for undergraduates. Sometimes sponsored by School of Theoretical & Applied Science.

2070 RUTGERS COLLEGE
New Brunswick, NJ 07430

c01 Phys 370: Science & Technology in Society. Relations between sci. & tech., their historical evolution, impacts on American society in contemporary period.
b & ja
Fac: L Hartmann Hoddeson
75s

2080 STEVENS INSTITUTE OF TECHNOLOGY
Hoboken, NJ 07030

p01 Technology & Society Curriculum

c01 CivEng 144: Case Studies in Civil-Environmental-Urban Management Engineering. Case studies--financial, social engineering, & legal aspects.
Fac: R Fenton
2x; 20s; G

c02 CivEng 145: Urban Studies. Preparation & analysis of environmental impact studies.
Burchell & Listokin, et al.
Fac: F Suljik
1x; 20s; G

c03 Hum 29-30: Science, Technology, & Society I & II. Impact of sci. & tech. on society.
b & ja
Fac: H Dorn, J Felman
5x; 100s; U

c04 Hum 45: The Engineer in History. Changing roles of engineer & engineering enterprise.
b & ja
Fac: H Dorn
1x; 30s; U

c05 Hum 48: History of American Science & Technology. Survey of development of sci. & tech. & their changing patterns of interdependence in US during 19th & 20th C.
b & ja
Fac: H Dorn
2x; 30s; U

c06 Hum 57: The Comparative Politics of Science & Technology. Sci. & tech. as phenomena within political system of US.
b & ja
Fac: AB Urken
1x; 30s; U

c07 Hum 61: History of Modern Biology. Major developments in biology from Darwin to genetic code.
b & ja
Fac: J Felman
1x; 30s; U

c08	Hum 67: Minds, Machines & the Semi-Artificial Man. Social & philosophical implications of machines with artificial intelligence.	b & ja Fac: J Felman 3x; 30s; U
c09	Hum 93: History of Science. Case studies in development of scientific ideas & interaction of sci. & society.	b & ja Fac: H Dorn 5x; 40s; U
c10	Tech 35-36: Problem Solving I & II. Discussion of solutions to problems at interface between tech. & society.	b & ja Fac: A Shapiro, et.al. 1x; 16s

Future Plans: developing expansion of clinic & internship activities as well as new quantitative interdisciplinary courses within Technology & Society Curriculum.

2090 UPSALA COLLEGE
East Orange, NJ 07019

c01	Chem 104: The Nature of Science. History of evolution of sci.	ja; Bronowski (1974). Fac: JE Simmons 2x
c02	Sci 309: Science, Technology & Public Policy. Specific topics relating sci. & government.	Snow (1961; 1964); Jungk; Rocks & Runyon. Fac: DK McGuire 4x

NEW MEXICO

2100 NEW MEXICO STATE UNIVERSITY
Las Cruces, NM 88003

c01	Phys 108: Energy, Science & Society. Energy in classical mechanics, heat, & electricity; energy in modern physics; energy tech.; social, ecological, & environmental issues in regard to energy.	b & ja; Theimer. 2x
c02	Phys 360-361: Natural Philosophy/Modern Physics & Its Social & Philosophical Ramifications. Fundamental concepts of physics & border regions between sci., philosophy, & pseudo-sci. Natural philosophy & social issues related to sci. & tech.	Theimer 3x

2110 UNIVERSITY OF NEW MEXICO
Albuquerque, NM 87131

Program for Advanced Study in Public Science Policy & Administration (PA)

c01 PA 595: Seminar: Public Science Policy & Administration.
Review of literature in field.
Rosenthal; Reagan; Greenberg; Lindblom; Churchman (1968); Schooler; Toffler (1970); ja.
Fac: AH Rosenthal

Future Plans: work in field of energy.

NEW YORK

2120 ADELPHI UNIVERSITY
Garden City, NY 11530

c01 ID 273: Science, Technology, & Society: Past, Present, & Future.
Selected aspects of historical & present relationships among sci., tech., & society.
Mumford (1934); Ferkiss (1969); Detweiler, Sutherland, & Werthman; Barnett; Dechert; Schroeer; Morison.
Fac: P Kelly, T Morrone
G

2130 ALFRED UNIVERSITY
Alfred, NY 14802

c01 Bio 102: Modern Biology with Human Implications.
Consideration of man & other organisms with particular relation to biosphere.
Davis & Solomon
Fac: Rough, Finlay

c02 BusAd 243: Environmental Controls & Business.
Basic structure & approach of environmental controls affecting commercial enterprises.
Kelley
Fac: Miles, Biggs

c03 Phys 105-106: Introduction to Natural Science.
Introductory sci. course with emphasis on historical & philosophical approaches to natural scis.
LB Young; Newton.
Fac: G Towe

c04 Soc 107: Computers & Society.
Concepts of programming, analysis of problems.
Sanders
Fac: staff

2140 BOROUGH OF MANHATTAN COMMUNITY COLLEGE
New York, NY 10019

c01 DataProc: Computers & Society. — Fac: D Rosich

2150 BRIARCLIFF COLLEGE
Briarcliff Manor, NY 10510

c01 Bio 304: Science & Public Affairs. — ja
Analysis of areas in which sci. & tech. relate to problems of contemporary society.
Fac: J Swatek

c02 Geog 223: Environmental Issues of the Seventies. — ja
Focus on those environmental issues for which no firm policies have been formulated from geographic framework.
Fac: B LaRose

c03 Geog 311: Measurement of Environmental Quality & Environmental Impact. — ja
Use of indices for environmental quality & impact of man on environment. Preparation of environmental impact statement.
Fac: B LaRose

c04 Pol 350: Science & Social Policy. — b & ja
Effect of tech. on democratic values. Dialectic of sci. & political change.
Fac: S Farganis

Future Plans: expansion of Institute of Public Affairs to include more specific courses in public policy.

2160 BRONX COMMUNITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
Bronx, NY 10453

c01 Hist 34: History of Science & Technology. — b
Major developments in sci. & tech. & their impact on man & society; growth & interaction of sci. & tech. & their consequences for the human condition.
Fac: JD Ryan

c02 ID 21: Independent Study in History--the Ascent of Man. — av; Bronowski (1974).
History of tech.
Fac: JD Ryan

Future Plans: interdisciplinary studies option on urban problems. This program will integrate physical & social scis. Emphasis will be on city as human environment, exploring interaction of humanities & scis. in creation, maintenance, & upgrading of urban area as a human habitat.

2170 CITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
New York, NY 10031

p01 Program in Health, Medicine, & Society (PHMS)

Abbreviations: PHS = Program for Humanistic Studies

c01 Eng 5601: History & Philosophy of Science & Engineering.
Historical study of psychological & social factors in scientific discovery, in engineering invention, & of role of creative leadership in sci. & tech. in industry & education.
b
Fac: W Rand
4x; 15s; G

c02 Hist 381: Science, Technology, & Human Culture.
Role of sci. & tech. in interdisciplinary developments related to man's creative activities, to man's aesthetic & ethical concepts, & to priorities in cultural, social, & industrial programs.
b & ja
Fac: W Rand-CivEng
14x; 30s; U

c03 PHS 322: Futuristics.
Present state of futuristics; provides criteria for evaluation of methods, predictions, & ideas on alternative options & desirable trends.
Toffler (1972); b & ja.
Fac: W Rand
1x; 18s; U

Colloquia/Lecture Series

1. PHMS Lecture Series: for undergraduates & faculty. Arranger: TM Brown.

Future Plans: PHMS developing courses in biomedical ethics.

2180 COLGATE UNIVERSITY
Hamilton, NY 13346

c01 UnivStud 101: Problems in Science.
Historical development of selected theories in physical & biological scis. from Greeks to present. Nature of sci. & scientific inquiry.
Fac: Gibbs, Holbrow

c02 UnivStud 110: Social Implications of Mineral Resources.
Pollution & conservation as consequences of man's exploitative nature; social implications of this man-environment interaction.
Fac: Newberg

c03 UnivStud 111: Energy Resources. — Fac: Cecil
Geologic origin & occurrence of energy resources. Effects of recovery process on environment. Utilization of energy resources & environmental implications.

c04 UnivStud 118: Man, Science & the Coastal Zone. — Fac: McClennen
Survey of physical, chemical, biological, & geological processes active in coastal zone. Use & development of populated estuarine centers considered from private, commercial, academic, & governmental viewpoints.

c05 UnivStud 127: Human Biology. — Fac: Pearce
Special consideration to specific topics of social nature as they apply to biology of man, i.e., birth control, human genetics, bioethics.

2190 COLLEGE OF MOUNT SAINT VINCENT
Riverdale, NY 10471

Abbreviations: CE = Continuing Education Course

c01 Bio 216: Bioethics. — ja
Ethical & social problems inherent in recent advances in cell biology, genetics, & medicine.
Fac: T Stonier, J Griffin
RelStud
5x; 100s

c02 Bio 219: Biology of Man & His Environment. — Fac: U Naf, K Tracey
Expression of man's evolution in culture & tech.; biological implications of human activities for modern man.
6x; 25s

c03 Bio 220: Urban Ecology. — Detwyler, et al.; SA; S.
Biological, behavioral, biomedical, & bioengineering problems associated with urban environment.
Fac: R Beardsley
6x; 25s

c04 Chem 210: Aspects of Modern Technology. — Toffler (1970); Reich; ja.
Major contributions of sci. in western culture with analysis of meaning, structure, & implications of 20th C tech.
Fac: MD McCarthy
6x; 10s

c05 CE 253C: Continuity & Change in the Natural Sciences. — Fac: M Higgins
10s

c06 CE 255C: Continuity & Change in the Social Sciences. — av; b & ja; n.
Fac: M Higgins
10s

c07 Econ 425: Urban Economy & the Environment. Heilbrun
Application of basic economic principles to urban economy & environment.
Fac: L Lopilato
3x; 10s

c08 Econ/Soc/Bio: Coordinating Seminars I, II, III, IV. b & ja; f.
Selected socio-economic problems related to such phenomena as urbanization, overpopulation, accelerating technological development, pollution, & dwindling reserves of natural resources.
12s

2200 COLUMBIA UNIVERSITY
New York, NY 10027

Program in Engineering Education for Public Service
Program of General & Continuing Education in the Humanities (GCE)
Program in the Sociology of Sciences

c01 CompSci E4850y: Computers & Society.
Impact of computers on political, social, & economic processes. How society can direct development of computer applications.
Fac: B Gilchrist
GCE
1x; 25s; U, G

c02 Eng E1101y: The Cultural Impact of Engineering.
Responsibilities of engineering profession in development of technical culture; emphasis on contemporary situation in US. Ethical problems of the profession.
Fac: MG Salvadori
GCE

c03 Eng E4902x: Industrial Ethics for the 21st Century.
Assessment of industry's role in meeting long-term societal challenges such as depletion of energy & mineral resources & degradation of environment.
Fac: JK Tien-Metallurgy
GCE
1x; 35s; U, G

c04 Engl G6991y: Science & Imagination.
Influence of sci. on literature from 17th C to present.
Fac: JA Mazzeo
GCE

c05 GenlEd W3701x: The Use & Abuse of Science & Technology.
Scientific knowledge & its social implications, 17th C to present.
Fac: H Fruchtbaum-Hist&Phil of PubHealth
GCE

c06 GenlEd W3706y: Values & Ethics in the Biomedical Sciences & Health Care.
Prolongation of life, death & dying, human experimentation, behavior modification, abortion, health care priorities, rights & responsibilities.
Fac: H Fruchtbaum-Hist&Phil of PubHealth
BB Schoenberg-Clinical Psychiatry
associates from Med
GCE

c07	Phil 72y (Barnard): Ethics & Medicine. Philosophical examination of some of moral issues that have arisen in medical theory & practice.	Fac: R Blustein GCE
c08	Arch/Law W6010y: Environmental Impact Statements. Formulation & consideration of environmental impact statements; their legal aspects & influence on urban & regional planning.	Fac: Grad, Harris
c09	Eng 3005y: Technology & Society. Environmental & social impact of tech. on society, including ethics, privacy.	b & ja Fac: EL Gaden, SH Unger 5x; 30s; U
c10	Eng E3006: Technology & the Environment. Aspects of the environmental crisis which are related to technological development.	b & ja Fac: EL Gaden, SH Unger 1x; U
c11	Eng E4005x-E4006y: Seminar in Energy & Power. Ntl energy policy, modern fuel management, forecasting future needs, alternative resources, & similar topics of current interest.	Fac: Taussig
c12	Eng/Law W6277: Noise Pollution: Engineering & Legal Aspects.	b & ja Fac: CM Harris-ElecEng/Arch AJ Rosenthal-Law 3x; 12s; U, G
c13	Geog W4002: World Energy Perspectives.	
c14	Geog G9401: Seminar in Environmental Systems Analysis.	
c15	Hist W3791x: Problems in the History of Modern Science. Interpretative problems involving interaction of sci. with other intellectual currents & on role of sci. in society.	Fac: L Graham
c16	Hist W4649x-W4659y: Science & Technology in America.	Fac: H Fruchtbaum
c17	Hist W4659x-W4660y: Social History of Medicine & Health Care.	Fac: H Fruchtbaum
c18	Hist G8739y: Colloquium on the History of Science in the 20th Century. Problems in relationship of scis., philosophy, & political currents in 20th C. Discussion of philosophical interpretations of major developments in physics & biology	Fac: LR Graham

c19 Law 6242: Environmental Law.

c20 Law L9114: Seminar in Life Sciences & Law. Fac: Edgar, Gaylin
Interdisciplinary effort of law, medical, & theology students to study how public policy should be formulated in response to recent advances in medical & biological tech.

c21 Law L90234: Seminar on Computers, Society, & the Law. Fac: MR Wessel

c22 PolSci G4265x: The Social Control of Science & Technology. Fac: H Picker
Impact of sci. & tech. on contemporary personal values & views, social structure, & governmental institutions.

c23 PolSci G6212x: Politics & Computer Technology. Fac: AF Westin
Impact of computers, electronic communications, & management-sci. techniques on decision making process of government agencies at local, state, & federal levels.

Colloquia/Lecture Series

1. General Education Seminar: for staff, faculty, students, interested visitors. Arranger: GCE--RF Kuhns-Phil, R Belknap-SlavicLangs.
2. Seminar on Social Implications of Communication Technology: for faculty from various disciplines. Arranger: M Schwartz, RJ Schwarz (ElecEng).
3. Seminar on Energy: for faculty, students, research staff. Arranger: RT Taussig-MechEng.
4. Armstrong Lecture: topics cover ElecEng or CompSci & their relation to society. For faculty, researchers, graduate students. Arranger: HE Meadows, Jr.

2210 COLUMBIA UNIVERSITY SCHOOL OF PUBLIC HEALTH
New York, NY 10027

c01 PubHealth P6000: Perspectives in the History & Philosophy of Public Health.
Concepts of disease & medicine in history; population & poverty; rise of scientific medicine; Social Darwinism, eugenics, & ideology; tech., environment, & values.

c02 PubHealth P6001: Perspectives in the History & Philosophy of Public Health in America.
Disease & social philosophy in early America; industrialization, medicine, & Jacksonian democracy; environmental idea; values in biomedicine.

c03 PubHealth P6015: Ethical & Value Considerations in Health Care.
Ethical & value considerations as necessarily involved in all health delivery systems. Signficant historical conflicts in public health & medicine centering around ethics & values. Current major issues.

c04 PubHealth P6216: Psychiatry & the Law.
Mental disorders & interpersonal conflicts with which law intimately involved. Prevention & management.

c05 PubHealth P6312: Environmental Economics.
Basic economic concepts used in analyses for environmental policy making.

c06 PubHealth P8714: Population & Policy.
Social & political aspects of population growth in relation to population policy.

2220 CORNELL UNIVERSITY
Ithaca, NY 14853

p01 Peace Studies Program (PSP)
p02 Program on Policies for Science & Technology in Developing Nations (PPSTDN)
p03 Program on Science, Technology, & Society (STS)
p04 Research Program on Social Analyses of Science Systems (SASS)

Abbreviations: BPA = School of Business & Public Administration
CRP = City & Regional Planning

c01 AgEng 495/CRP 468/RuralSoc 458: Transportation Policies for Developing Nations, with Emphasis on Low-Volume Roads.
Multidisciplinary study of processes of policy formulation & planning of transportation facilities in developing nations with different energy resources.

ja
Fac: LH Irwin-AgEng
GJ Cummings-RuralSoc
DF Williams-CRP
PPSTDN
1x; 45s; Ucl, G

c02 Arch 614/CRP 777/Eng G655: Low-Cost Housing for Developing Nations.
Aspects of low-cost housing involving engineering, architecture, physical planning, economics, & sociology.

b
Fac: FO Slate-Civ&EnvEng
DF Williams-CRP
& others
PPSTDN
2x; 80s; G

c03	BPA NCE-512/Govt 685: Science, Technology, & Development. Examination of issues involved in formulation & implementation of ntl sci. & tech. policies in less-developed countries; processes of transferring physical & managerial techs. between industrialized & less industrialized countries.	b & ja Fac: M Esman & others PPSTDN, STS 4x; 20s; G, Srs
c04	CRP 862: Seminar on Science & Technology Policy in Developing Nations. Issues facing developing nations as they endeavor to use tech. in pursuit of ntl goals.	Fac: D Lewis PPSTDN 1x; G
c05	CRP 865: Seminar in Policy Planning in Developing Nations: Technology Transfer & Adaptation. Intnl transfer of tech. to developing nations & policies used to guide this process.	Fac: D Lewis PPSTDN
c06	BioSci 206/Phil 245: Biomedical Ethics. Elucidation & analysis of certain fundamental ethical concepts by application to biomedical examples.	Wertz; Frankena; r. Fac: SM Brown, L Purdy STS 2x; 30s; Ucl, G
c07	BioSci 207/Phil 246: Environmental Ethics. Elucidation & analysis of certain fundamental concepts by application to environmental problems.	Fac: SM Brown, L Purdy 1x; Ucl, G
c08	BPA NPA-504/Govt 626: Science, Technology, & Public Policy in the United States. Examination of sci. policy & policy making in US.	Galbraith (1969); Issawi; Morison; Schultze. Fac: FA Long STS 6x; 20s; G
c09	BPA NCE-513/Govt 683: Science, Technology, & International Relations. Sci./tech. relations among advanced industrialized countries & foreign policy implications of scientific & tech. policy.	b & ja Fac: M Esman STS 2x; 10s; G, Srs
c10	BPA NPA-513/CRP 533/Govt 629: The Politics of Technical Decisions. Political aspects of those public policy decisions traditionally regarded as "technical" problems best resolved by experts.	b & ja Fac: J Milch, D Nelkin STS 2x; 25s; G

c11	CPR 434/Govt/Econ 302: The Impact & Control of Technological Change. Problems of controlling technological change with emphasis on problems of democratic participation in complex technical decisions.	b & ja Fac: J Milch, D Nelkin STS 4x; 50s; Ucl
c12	CompSci 105: The Computerized Society. Impact of computers on society from perspectives of scis., social scis., & humanities.	Gotlieb & Borodin; b & ja. Fac: A Borodin STS 6x; 30s; U
c13	Eng 11B205: Social Implications of Technology. Introductory survey of issues pertaining to development, implementation, & assessment of tech.	Teich; de Nevers; Ibsen; r. Fac: WR Lynn-EnvEng ED Heitowit-STS STS 7x; 60s; Ucl
c14	Eng 1MG302: Technology & Society--an Historical Perspective. Introduction to history of tech. & its relationship to society; emphasis on social, economic, & political consequences of tech.	b & ja Fac: B Conta-Mech&AerospaceEng STS 5x; 60s
c15	Eng 11F605: The Law & Environmental Control. Introduction to structure & operation of legal system & manner in which it may handle environmental problems.	b & ja Fac: N Orloff-EnvEng/STS STS 7x; 35s; G, Srs
c16	Eng 11F606: Seminar in Technology Assessment. Social consequences of future technological developments & how to guide tech. in socially beneficial directions.	b & ja Fac: R Bowers & others STS 7x; 25s
c17	Govt 312: Urban Studies Laboratory. Lab experience to integrate knowledge & test alternative solutions to urban problems. Large-scale computer simulation.	b Fac: D Van Houweling STS 6x; 95s; U
c18	Govt 384: Defense Policy & Arms Control. Analysis of requirements for military defense & of problems caused thereby.	Fac: FA Long, G Quester STS 2x; 15s
c19	Hist 280: Freshman Seminar in the History of Technology. Selected problems in social & cultural history of tech. in western civilization. Extent to which tech. has determined way people lived & gave meaning to life since fall of Rome.	Fac: J Weiss STS 1x; 20s; Freshmen

c20	Hist/Phil 386: Problems in the Philosophy & History of Biology. Historical development of philosophical problems in biology.	b Fac: W Provine-Hist R Boyd-Phil STS 2x; 40s; U, G
c21	Law 578: Legal & Market Controls of Technological Change. Survey of legal & market mechanisms controlling important technological changes.	b & ja Fac: JP Brown STS 1x; 16s; L, Ucl
c22	Law 589: Seminar on Science, Technology, & Law. Interdisciplinary exploration of problems posed by, & solutions potential in, the sci. & tech. of affluence.	ja Fac: K Hanslowe STS 2x; L, G
c23	Phil 681: Philosophy of Science--Seminar on Problems of Rationality. "Conceptual analysis" of central ideas & methodologies in conjunction with particular problem situations.	b; r. Fac: M Black STS 3x; 15s; Ucl, G
c24	Soc 403: Sociology of Science & Technology. Organization & utilization of sci. & tech.; external support structure of sci.; interplay among sci. & tech., government, & industry in terms of consequences for quality of life over next 10-15 years.	Douglas (1970); Ellul (1964). Fac: G Gordon STS 4x; 20s; Ucl
c25	Soc 529: Demographic & Ecological Models of Science. Critical review of models of sci. & their theoretical underpinnings.	b & ja Fac: D Chubin STS 1x; 7s
c26	Bio 204/Hist 284/CollScholar 284: Undergraduate Seminar in History of Biology. Biological determinism, focusing on issues related to race, sex, & intelligence.	Fac: JM Fessenden-Raden-Bio WB Provine-Hist 20s; Ucl
c27	Hist 680-681: Seminar on the History of Science During the 19th & 20th Centuries.	Fac: LP Williams
c28	Law 530: Environmental Law. Canvass of law relevant to environment. Readings in political & economic realm bearing on the developing law in environmental field.	Fac: EF Roberts 6x; 6s

c29 Law 557: Computers & the Law.
Consideration of some problems & possibilities presented to the law by the modern large-scale computer.
Fac: RS Pasley
7x; 6s

c30 Law 566: Experimentation on Human Subjects.
Examines whether present regulation of the research process is satisfactory.
Katz
Fac: LI Palmer
1x; 13s

c31 Law 584: Problems in Environmental Planning.
Explores border between conventional land-use controls & more recent environmental law controls.
Fac: EF Roberts

Colloquia/Lecture Series

1. Faculty Colloquium on the Humanistic Implications of Science & Technology: for faculty. Arranger: SM Brown, Jr. & M Black--STS.

2. STS Luncheon Seminar: for faculty, researchers, graduate students. Arranger: J Milch.

3. PPSTDN Research Conferences: for faculty, researchers, multidisciplinary professionals. Arranger: D Lewis.

Future Plans: developing a proposal for a major in Biology & Society; an Energy Policy Studies Unit is being formed in affiliation with STS.

2230 CORNING COMMUNITY COLLEGE
Corning, NY 14830

c01 Sci 108: Science in Today's Society.
Interaction of sci./tech. with society.
Fischer; Meadows, et al.; Ehrlich.
Fac: J Vikin & others

Future Plans: work in area of tech. assessment.

2240 DUTCHESS COMMUNITY COLLEGE
Poughkeepsie, NY 12601

c01 Bio 104: Man & His Environment II.
Man & his relationship to external environment, including pollution, radiation damage, & economic uses of natural areas.
Fac: Muschio

c02 Econ 121: Environmental Economics.
Basic economic tools used to help explain nature of environmental problems, including cost of alternatives.
Fac: X Verbeck
Hist, Govt

c03	PhysSci 103: The Man-Made World. General role of tech. in society, negative & positive.	SA; f. Fac: R O'Connor
c04	PhysSci 105: American Science & Technology. Development of American tech. from 1800 to present.	b & ja Fac: R O'Connor

2250 FORDHAM UNIVERSITY
Bronx, NY 10458

Abbreviations: EX = EXCEL Program: Science as a Way of Seeing

c01	Econ 354: Socio-Economic Causes & Consequences of Technological Progress.	b & ja; n.s.: Mesthene, Ellul, Saliter, et.al. Fac: M Parvin
c02	EX 5: The History of Science. History of scientific thought & discovery; sci. & religion.	
c03	EX 7: The Elements of Matter & Life. Introduction to chemistry & biochemistry with emphasis on their interaction with man & his world. Major emphasis on future trends encompassed by biological-chemical, environmental-ecological problems.	
c04	NatSci 16: History of Science. Influence of sci. on history of man. Role of disease, natural disasters, & tech. as factors making history.	
c05	NatSci 17: Religious & Ethical Problems of Science.	Fac: Cantore
c06	NatSci 18: Humanistic Significance of Science. Sci., philosophy, & sociology.	Fac: Cantore
c07	Pol 187: International Environmental Politics. Development of principles, cooperation, & institutions relating to intnl utilization of human environment.	Fac: Remec
c08	SocSci 1: Contemporary Problems of Science & Society. Scientific, social, & political aspects of recent technological developments, including military tech., energy crisis, environmental problems.	Fac: Shapiro

c09 SocSci 2: Science, Technology & Society.
Mutual interactions between needs of society & developments of sci. & tech.
Fac: Zinnes

c10 SocSci 133: Medical Anthropology.
How cultural practices & genetic characteristics affect disease patterns; how disease influences social organization; relationship between health, culture, & society
Fac: Sanders-Anthro

2260 FULTON-MONTGOMERY COMMUNITY COLLEGE
Johnstown, NY 12095

c01 Sci 130: Science, Technology, & Society.
Topics include systems approach to problem assessment, modeling systems, optimization, decision making, & tech. assessment.
b & ja
Fac: VD Pynadath
25s

c02 Sci 131: Environmental Physics.
Contemporary problems of energy, environment, & depletion of natural resources, including energy sources of future, limits to exponential growth on finite planet.
TL Brown
Fac: VD Pynadath
15s

2270 HAMILTON COLLEGE
Clinton, NY 13323

Abbreviations: KC = Kirkland College

c01 Bio: Human Genetics.
Study of facts & techniques of human genetics in relation to contemporary societal problems.
Fac: J Ellis

c02 Bio: The Ethics of Genetic Control.
Baer; Hilton, et al.; Harvard Educational Review; Bronowski (1956); J Allen.
Fac: J Ellis

c03 German: Portrayals of Scientists & their Problems in 20th Century German Fiction.
Complex relationships of scientists & society as presented in modern German literature.
n.s.: Brecht, Kaiser, Frisch, Kipphardt, et al.
Fac: S Weiss

c04 Govt 38: Science, Technology & Public Policy.
Comparison of scientific & political realms; politics of sci. Focus on US with comparisons with Western Europe, Soviet Union, China, & low-income countries.
Snow (1961); Lindblom; D Freeman; Shils; OECD; Greenberg; NAS; ja.
Fac: RP Suttmeier

c05 KC: Selected Courses in History of Science. Fac: N George, R Rinard

c06 Phil: Philosophical Problems in Medicine. Conceptual & ethical problems that arise from biomedical research & practice of medicine.
Fac: R Simon

c07 Phys: Nuclear Energy.
Inglis
Fac: JW Ring

Colloquia/Lecture Series

1. Computers: Implications, Applications & Supplications: sponsored by Link Foundation. Arranger: D Smallen.

Future Plans: several members of faculty have indicated interest in initiating interdisciplinary program on sci., tech., & society; discussions at very early stage.

2280 HARTWICK COLLEGE
Oneonta, NY 13820

c01 Bio: Conversations in Biology. Concepts of biology & their relationship to society.
b & ja
Fac: staff
300s; U

c02 Bio: Plants & Civilization. Influence of plants on man's economic & cultural history.
HG Baker; SA.
Fac: RR Smith
U

c03 ID: Man Against Nature. Man's place in nature--past, present, & future.
b & ja
Fac: BE Raemsch
70s; U

c04 ID: Science, Society, & Survival. Interrelationships between sci. & society which are necessary for mankind's survival.
b & ja
Fac: EJ Smith
30s

c05 Nurs: Trends & Issues in Health Care. Legal & political implications of modern health tech.
b & ja
Fac: staff
30s; U

2290 HOFSTRA UNIVERSITY
Hempstead, NY 11550

c01 Eng 149: Technology & Society. Topics include population & resources, pollution; energy crisis, military-industrial complex, computers & society, law enforcement, transportation, communications.
Kneiman; Mason & Folkerts; Teague & Erickson; f.
Fac: R Dolin
6x; 30s; U, G

Future Plans: study to be made of possible program in tech. & public policy.

2300 IONA COLLEGE
New Rochelle, NY 10801

c01 Bio 750: Concepts of Biology.
Cultural & historical perspectives of biology; relationships with humanistic, social, & philosophical concerns.
av
Fac: GS Pappas

c02 NatSci 106: Chemistry & Contemporary Society.
Impact of chemistry on contemporary society; drugs, energy, synthetic materials, pollution.
av
Fac: LS Campisi

2310 ITHACA COLLEGE
Ithaca, NY 14850

c01 Bio/Pol/Soc/Phys/Econ: Environmental Crisis & Survival.
Present worldwide environmental problems & their social, economic, & political ramifications & possible solutions.
Commoner; Meadows, et al.; Ehrlich, Ehrlich, & Holdren.
Fac: J Confer, I Tamas--Bio
R Kaaret-Pol
J Laskowitz-Soc
J Schwartz-Phys
N Wilson-Econ

c02 Phys: Science & Society.
Teaches sci. while surveying number of topics.
Schroeer
Fac: C Spencer

c03 Pol/Phys: Science & Public Policy.
Policy formulation & evaluation on sci.-related problems on federal level.
Lindblom; Brecht; DK Price.
Fac: J Ryan-Pol
M Steinberg-Phys

Colloquia/Lecture Series

1. CP Snow Lectures: annual; usually 3-4 speakers from outside university. College-wide.

Future Plans: possible sequence of freshman-sophomore courses related to policy problems with emphasis on scientific & medical problems.

2320 JAMESTOWN COMMUNITY COLLEGE
Jamestown, NY 14701

c01 Bio 155-156: Science & the Citizen.
Impact of sci. on society as seen in problems of pollution, uses of atomic energy, & biological hazards of pesticides; consideration of public policy for each problem.
Fac: RT Smith

2330 JOHN JAY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
New York, NY 10019

c01 Econ 293: Environmental Economics.

c02 EnvStud 302: Legal Aspects of Environmental Protection.

2340 HERBERT H. LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
Bronx, NY 10468

c01 Hist 349: Science & Society.
Historical development of sci. as social phenomenon. Moral responsibilities faced by scientists & possible future directions of sci.

b & ja
Fac: J Dauben
15s

c02 Soc 369: Knowledge, Science & Society.
Interaction between sci. & ideas; social determinants of creativity & scientific discovery; ethical problems concerning sci. in modern society.

b
Fac: J Lally
12s

c03 Soc 481: Social Conflicts & the Environment.
Values & social definitions as expressed in current debate on environment. Bases of support for the environmental movement & its critics.

b & ja
Fac: R Meyersohn
12s

2350 LE MOYNE COLLEGE
Syracuse, NY 13214

c01 Hist 477: Seminar in History of Science & Technology in America.
Modern American attitudes toward sci. & tech.

b & ja
8s; U

c02 Rel 330/Bio 300: Perspectives on Human Life.
Christian bioethics leading to making of moral decisions in highly complex biomedical areas.

Polanyi (1964); Yoder; b & ja.
Fac: E Zogby-RelStud
A Szebenyi-Bio

c03 Rel 434/Soc 239: Death & Dying.
Sociological & theological aspects of the experience of death & dying, including moral & ethical questions.

Boros; Troisfontaines; Kubler-Ross; NBC-TV Special.
Fac: T Curtin-RelStud
G Christie-Soc
1x; 35s; U

2360 MANHATTAN COLLEGE
Bronx, NY 10471

c01 Bio 216: Bioethics. b; av.
Ethical & social problems inherent in recent advances in cell biology, genetics, & medicine. Social & political role of scientists.

c02 Bio 219: Biology of Man & His Environment.
Biological nature of man as unique product of primate evolution with capacity for non-genetic evolution; expression of this evolution in culture & tech.; biological implications of human activities for modern man.

c03 Hist 472: The Impact of Science & Technology from the 18th to the 20th Centuries. b; av.
Profound effect of new sci. on modern world.

c04 Phil 417: Contemporary Ethics.
Readings from classical & contemporary sources; ethical impact of Marxist & Freudian thought; recent biomedical & social problems.

c05 RelStud 463: Science & Religion.
Impact of scientific revolution viewed from Catholic & humanistic viewpoint. Bioethics.

2370 NEW YORK MEDICAL COLLEGE
Valhalla, NY 10595

c01 Medical Ethics Elective. ja; n; HC.
Aids students in developing set of values in their career & makes them aware of common problems in moral & ethical behavior & choices.
Fac: FE Wassermann

2380 NYACK COLLEGE
Nyack, NY 10960

c01 ID: Preparation for the Year 2000; Futurism & Continuing Trends. Kahn & Briggs
Fac: staff

c02 Phil: Science & Values.
History & philosophy of sci.; connection between human values & scientific progress; dialectic of scientific debate & progress.
Fac: M Miller & others
Other departments

c03 Soc: World Population Problems.
Fac: Wilson

c04 Soc: World Urbanization.
Fac: Wilson

2390 PACE UNIVERSITY
New York, NY 10038

c01 Bio 109: Biology & Society.
Man's role in society & in nature & the biological contrasts imposed by natural laws.
Wallace
Fac: L Katz

2400 RENSSELAER POLYTECHNIC INSTITUTE
Troy, NY 12181

p01 Center for the Study of the Human Dimensions of Science & Technology (HDC)
Center for Technology Assessment (CTA)

c01 HDC 45.101: Science, Technology & Values.
Alternative techs.; invention & culture; sci. & religion.
Dickson; Lewis; Lama Foundation; b & ja.
Fac: S Restivo-Soc
J Koller-Phil
S Butler-Econ
J Brown-Hist
C Sanford-Lit&AmerStud
D Livingston-PolSci
25s; U

c02 HDC 45.201: Transnational Values & Technology.
Interrelations of values & techs. in India, Southeast Asia, & US.
M Singer; Burling; Marriot; b & ja.
Fac: R Diwan-Econ
J Koller-Phil
H Meiners-Phys
C Lantz-Anthro
B Coyer-PolSci
L Hanks-Anthro
S Restivo-Soc
ix

c03 HDC 45.1971: Images of Man.
Attempt to develop image of man that incorporates the scientific/technological into holistic vision adequate for personal & social direction in our time.
Bronowski (1974); K Clark; ja.
Fac: M Abrash-Hist&Arts
R Calinger-Hist
J Koller-Phil
S Restivo-Soc
ix; 30s; U

c04	HDC: Multi-Media History of Modern Science. Illuminates human & social aspects of modern sci. through use of variety of media.	Fac: J Brown-Hist R Calinger-Hist
c05	HDC: Human Dimensions of Medical Innovations. Explores social significance & value implications of recent innovations in medicine.	
c06	CTA 90.601: Engineering in a Social Context. Social implications of tech.	b & ja Fac: VL Ferwerda-PolSci 4x; 20s; U, G
c07	Hist/PolSci 53.298: Science, Technology, & Public Policy. Interaction of US government on sci. & tech.; role of technical advisors in government.	Greenberg; Teich; ja. Fac: D Livingston 12s; U
c08	Hist/PolSci 53.2972: Futuristics, Survival, & World Order. Implications of limits to growth controversies for design of alternative, preferred world futures.	Beres & Targ; S Brown. Fac: D Livingston 15s; U
c09	Lit 43.272: Humanistic Basis of Science Fiction. Sci., values, & future studies in their interrelationships using medium of sci. fiction.	Fac: C Sanford 2x; 30s; U
c10	Phil 48.250: Life, Death & Human Experimentation.	b & ja Fac: R Baum, A Flores, R Anderson, P Devine 4x; 60s; U
c11	Phil 48.2973: Values & World-views in Science Education. Values & world-views implicit in the scis. & their place in sci. education.	Fac: M Zenzen-Phil H Hollinger-Chem 1x; 14s; U
c12	Phil 48.2976: Poetry, Science & Religion. Creativity & experimentation in 3 apparently diverse areas of human experience in terms of similarities & differences.	Fac: L Hammer-Phil I Traschen-Lit 1x; 20s; U
c13	Soc 55.214: Sociology of Medicine. Contributions of social sci. to medicine. Viewpoint of patient, medical care giver, & health system.	b & ja Fac: D Ellison 2x; 20s; U

c14	Soc 55.221: Population Problems. Fertility, migration, & mortality in relation to social, economic, & policy questions.	b & ja Fac: A Mundigo 2x; 25s; U
c15	Soc 55.4xx: Science, Engineering & Society. Comparative study of sci. & engineering as social systems, social roles of scientists & engineers, sociology of scientific & other modes of inquiry.	b & ja Fac: S Restivo 1x; 30s; U, G
c16	Soc 55.2971: Socio-Cultural Studies of Technology & Change. Sociological & anthropological perspectives on sci. & tech.	b & ja Fac: S Restivo-Soc D Orlowski-Anthro 3x; 20s; U

Colloquia/Lecture Series

1. Alternative Futures Group Luncheon Seminar: for faculty. Arranger: D Livingston & D Hill.
2. Dohrenwend Lecture Series (on the Society of Tomorrow): for faculty, students, public. Arranger: J Koller (1975).

Future Plans: HDC developing M.S. & B.S. curricula in Science-Technology Studies.

2410 ROCHESTER INSTITUTE OF TECHNOLOGY
Rochester, NY 14623

Abbreviations: GSHN indicates courses within College of General Studies

c01	GSHN 211: Science & Human Values.	b & ja Fac: E Hennick
c02	GSHN 501: Technology & the Individual.	b & ja Fac: E Hennick
c03	GSHN 502: Social Consequences of Technology.	b & ja Fac: E Hennick, V Raman

2420 RUSSELL SAGE COLLEGE
Troy, NY 12180

c01	Bio 112: Population, Resources & Man. Introductory analysis of man's ecology.	b & ja Fac: E Horn
c02	Phil 235-236: Biomedical Ethics.	b & ja Fac: R Ahlers

2430 ST. JOHN FISHER COLLEGE
Rochester, NY 14618

c01	Bio 102: Biology in Society. Biological principles underlying some issues with moral, legal, or social implications.	b & ja; f. Fac: Gawlik 1x; 150s
c02	Sci 200: Energy: Its Science & Technology. The sci., tech., social impact, & economics of man's consumption of energy.	Hammond, Metz, & Maugh; b & ja. Fac: Heininger 1x; 4s

2440 ST. LAWRENCE UNIVERSITY
Canton, NY 13617

c01	EnvStud 201: Introduction to Environmental Studies. Evolution of environmental problems & the social settings for dealing with them.	Turk, Turk, Wittes, & Wittes (1974) Fac: AM Schwartz & others 2x; 200s
c02	EnvStud 202: Introduction to Environmental Studies. Environmental degradation, ethics, & energy.	Turk, Turk, Wittes, & Wittes (1974); Leopold; Steinhart & Steinhart; b & ja. Fac: AM Schwartz & others 1x; 150s
c03	Govt 341: Environmental Law & Politics. Government reactions to problems of environmental protection.	W Anderson; b & ja. Fac: B Lammers 40s

Future Plans: expansion of Environmental Studies Program will include courses in environmental economics, environmental ethics, environmental chemistry, rural sociology, & others.

2450 SOUTHAMPTON COLLEGE OF LONG ISLAND UNIVERSITY
Southampton, NY 11968

c01	EnvStud 321: Regional Planning & Environmental Protection. Regional planning; social, political, legal strategies for improving environmental quality.	McHarg Fac: I Marceau, M Pawlukiewicz 25s
c02	EnvStud 322: Environmental Law. Major environmental court decisions; Ntl Environmental Policy Act; impact assessment process.	ja Fac: V Yannacone 25s
c03	EnvStud 333: Environmental Impact Assessment. Emphasis on effective writing of impact statements.	Fac: M Pawlukiewicz 20s

c04 Geol 202: Petroleum & Other Sources of Energy. Fac: CL McCormick, R Eastin
Problems & potentials of nuclear, solar, & geothermal energy.

c05 SocSci 264: World Population Problems. Fac: R Sipes
Possible consequences of alternative strategies of population control. 25s

2460 STATE UNIVERSITY OF NEW YORK AT ALBANY
Albany, NY 12222

Abbreviations: M&I = Allen Collegiate Center--Man & His Institutions
STS = Science & Technology Studies (program disbanded)

c01 STS 500: Science, Technology & Society I. Fac: JJ Bulloff-HistSci
Scientific revolution in macroscopic & atomic-molecular (1800-1900) era; mechanization phase of industrial revolution. 19th C citadel & edifice of sci. & the society of progress & power. 15s; G

c02 STS 501: Science, Technology & Society II. Fac: JJ Bulloff
Toppling of 19th C citadel & edifice of sci. by quantum-relativity revolution & electronic-nuclear change of atomic-molecular ideas. Big Sci. Society & policy for an improved quality of life. 15s; G

c03 STS 502: Science & Technology Forecasting. Fac: JJ Bulloff
Relation of forecasting to assessment & planning of the generation & utilization of sci. & tech. 6s; G

c04 EnvStud/PubAffrs 150: Man Against His Environment. U
Major environmental issues, the social & political forces that generate & aggravate them, the limits & prospects of collective action & alternatives from which we must choose environmental policy.

c05 EnvStud/Econ 182: Economics & Environmental Policy. U
Economics of public policies which aim at environmental control.

c06 EnvStud 201: Environmental Technics. U
Social, environmental, economic, & political goals & consequences of the generation & utilization of sci. & tech.

c07 EnvStud/Bio 230: People & Resources in Ecological Perspective. U
Man as a global population & its social implications for resource exploitation. Historical perspective on resource-oriented behavior.

c08 EnvStud/PubAffrs 300a, b: Environmental Legislative Workshop. U
Intensive study of current NYS legislative proposals involving environmental issues. Preparation of factual analyses of these proposals for information of the legislators & general public.

c09 EnvStud/Chem 301: Chemistry in Society. U
Chemistry as human pursuit; nature of chemical knowledge & how it is obtained.

c10 EnvStud 303: Environmental Information. U
Statistical analysis & written presentation of environmental data. Decision models & environmental quality assurance. Preparation of public service, legislative position, & technical papers.

c11 EnvStud/Law 320: Environmental Law. U
Overview of legal problems in environmental management; emphasis on principles of effective resource management in an industrial society.

c12 EnvStud 402: Environmental Impact. U
Tech. assessment & environmental forecasting for government & corporate planning. Systems & information theory approaches to environmental impact statements & quality control policies.

c13 Mal 101a: Science & Society.
Nature of modern sci., important contemporary social issues & institutions with which sci. most closely identified, & historical processes linked to its development.

c14 Mal 101b: Science, Technology & Environment.
Biological evolution of human species, historical development of human society on advancing technological basis, & the pressing contemporary ecological problems seen as aspects of ongoing interaction between humanity & environment which transforms both. Environmental social policy.

2470 STATE UNIVERSITY OF NEW YORK AT BINGHAMTON
Binghamton, NY 13901

p01 Center for Integrative Studies

Abbreviations: AT = School of Advanced Technology

c01 AT 210: Technology & the Unmentionable.
Value problems arising from current tech.; traditional issues in values seen from perspective of recent scientific developments.
b & ja
Fac: R Ringle
1x; 27s; G, U

c02 AT 306: People & Their Things.
History of complex relationship between tech. & society, present & future.
b & ja
Fac: D Freedman
4x; 20s; G, U

c03 AT 307: The Technological Crisis of the Year.
1974: energy crisis. Analysis of resource availability; government policy impact & economic impact.
b & ja
Fac: J Colligan, D Freedman
2x; 10s; G, U

c04 AT 320: Concepts in Systems Theory I.
Models & how people make them. Models used by various scis. from social & psychological view.
b & ja
Fac: G Weinberg, D Gause
4x; 35s; G

c05 BioSci 105: Microbes & Man.
Relationship of microbes & their activities to man's existence & well-being. How control of microbial processes has altered quality of human existence.
Fac: Lazaroff
20s

c06 Econ 103: The Economics of Innovation & Technological Change.
Sources & impact of technical innovation on productivity, skills, & employment.
Fac: staff
25s

c07 Econ 281: Environmental Economics.
Economic analysis of environmental problems. Efficiency & equity implications of alternative public policies.
Fac: K Smith

c08 EnvStud 213: Environmental Impact Statement.
Ntl Environmental Policy Act & its requirements. Environmental impact statements.
Fac: Morisawa
40s

c09 Hist 159: Science & Sexuality in the Modern World.
What sci. & scientists have had to say about sex & woman question in Europe & US, 1850 to present.
Fac: staff
100s

2480 STATE UNIVERSITY OF NEW YORK AT BUFFALO
Buffalo, NY 14214

Socio-Engineering--Department of Civil Engineering (CIE)

c01 CIE 371: Technology & Society. Qualitative & quantitative techniques for identifying & solving engineering components of social problems.
b & ja
Fac: HK Chang
2x; 45s; U

c02 CIE 372: Impact of Technology upon Physical & Social Environments. Physical urban environment & effect of its technological components on identifiable social problems. Study of meanings of impact analysis.
b & ja
Fac: R Paaswell
1x; 22s; U

c03 CIE 375: Mathematical Modeling of Socio-Engineering Problems. Technical problems of society formulated & solutions consistent with goals of society developed.
b
Fac: W Recker, J Huddleston
3x; 20s; U

c04 CIE 538: Interaction of Society & Technology. Basic foundations of impact analyses; emphasis on how social values & beliefs are affected by new applications of tech. & how values & beliefs affect development of tech.
b & ja
Fac: C Notess
3x; 15s; G, U

Colloquia/Lecture Series

1. Distinguished Lecture Series: for faculty, researchers, graduate students. Arranger: GC Lee--CivEng.
2. Advances in Transportation: for faculty & researchers. Arranger: GC Lee.
3. Planning-Lecture Series: for graduates & undergraduates. Arranger: RE Paaswell.

2490 STATE UNIVERSITY OF NEW YORK AT STONY BROOK
Stony Brook, NY 11794

p01 Program on Technology & Society (ESI or MSC)

Abbreviations: CED = Continuing Education Division

c01 ESI-190: Man, Technology, & Society. Case studies of current socio-technological problems used to introduce major concepts of modern information sci. Sci. background of social & political decisions.
Fac: JG Truxal, M Visich

c02	ESI-191: Introduction to Technology Assessment (Issues, Methods, & Cases). Tech. assessment & consideration of alternative futures in relation to social control of technological development.	Fac: TT Liao
c03	ESI-194: Energy & Society. Tech. & economy of energy resources. Interaction of energy problems with the home, community, nation, & world.	Fac: SSL Chang
c04	ESI-205: Materials in the Modern World. Synthesis & structure of newly developed materials & their use in today's tech. Environmental impact.	Fac: P Herley
c05	ESI-210: The Exploration of Space. Basic engineering & scientific concepts of exploration of space. Role of man in space, benefits derived from space exploration.	Fac: M Visich
c06	ESI-220: Cybernetics. Basic concepts of cybernetics: control & communication in machines & men.	Fac: JG Truxal
c07	MSC-100: The Societal Impact of Computers. Critical assessment of role computing & data processing play in contemporary society. Economic, legal, & moral issues involved in utilization of computer capabilities.	Fac: L Braun
c08	CED: Selected Topics in Science & Society. In-depth case studies of current issues involving sci. & tech. that illustrate how & by whom sci. policy is established in US.	Friedlander; ja. Fac: L Paldy, AA Strassenburg, B Glass, JG Truxal
c09	Hist 135: Science in History. Case studies on influence of scientific ideas on intellectual life & vice versa.	b & ja; K Martin. Fac: E Garber 3x; 65s
c10	Hist 136: Technology in History. Case studies in influence of tech. on social change & vice versa.	b & ja; Smelser. Fac: R Cowan 3x; 65s
c11	Hist 252: Social History of Science. Sci. treated as institution of society.	b & ja; Dupree. Fac: E Garber
c12	Phil 553: Perspectives on the Environment. Various themes followed, such as "Tech. & the Environment."	Fac: various instructors G

c13 Phys: The Science Establishment in the US. Critical examination of federal agencies, scientific societies, & other institutions that determine what sci. & how much of it is done, how it is funded, & how information about the results is disseminated.

DK Price; Greenberg; ja; n.
Fac: L Paldy

Future Plans: (1) new degree program with strong sci. policy component, possible Ph.D. level; (2) thematic program in tech. & human values being considered--funding being sought.

2500 STATE UNIVERSITY OF NEW YORK COLLEGE AT CORTLAND
Cortland, NY 13045

c01 Anthro 410: Cultural Ecology. Relationship between sociocultural & environmental factors with special attention to political, techno-economic, & ideational phenomena.

Fac: N Gavrielides
2x; 10s

c02 Phil 351: Philosophy of Social Science. How sci. can be used to investigate human conduct & how much human conduct can be understood, measured, explained, & predicted by methods of sci.

Fac: W Barr
2x; 15s

c03 Sci 485: Science in the Social World. Modern scientific progress & its bearing upon human society.

Fac: H Bleecker-Phys
8x; 35s

2510 STATE UNIVERSITY OF NEW YORK COLLEGE OF ENVIRONMENTAL SCIENCE & FORESTRY
Syracuse, NY 13210

p01 Institute of Environmental Program Affairs (IEPA)

Abbreviations: ERM = School of Environmental & Resource Management
SFI = Silviculture & Forest Influences
MSS = Managerial & Social Science

c01 ERM 203: Social Sciences III--Political Processes. Concepts, theories, & terminology of American political system; emphasis on how system carries out & affects environmental & resource administration.

Burns & Peltason; Bennis & Slater; Benviniste; f; av.
Fac: D Muniak

c02 ERM 429/629: Environmental Impact: Principles & Strategy. Principles & theory of environmental impact as required by federal law.

FR Anderson
Fac: P Black, L Herrington
SFI

c03	ERM 465: The Social Environment of Resource Management. How economics, law, public policy, pressure groups, & financial considerations constrain the professional judgment of the resource manager & the goals & objectives of the institution employing him/her.	Worrell MSS
c04	EnvStud 100: Introduction to Environmental Studies. Nature of man, his social, cultural, economic, & political institutions, & how these condition his views of the environment.	Fac: A Lewis, H Tepper LandscapeArch, ForestBot
c05	EnvStud 101: Human Ecology. Principles of ecosystem structure & function developed in context of human values & societal structure.	Fac: H Canham, J Johnson

Colloquia/Lecture Series

1. IEPA Environmental Lecture Series: for students, faculty, community leaders, environmental & resource professionals. Arranger: D Behrend.

2. Environmental Leaders Forum: in collaboration with Environmental Studies Program at Cornell University. Arranger: D Behrend.

Future Plans: developing proposal for graduate program in Environmental Policy.

2520 STATE UNIVERSITY OF NEW YORK COLLEGE AT NEW PALTZ
New Paltz, NY 12561

c01	Geol 339: Minerals & World Affairs. Interaction of geology, engineering, economics, sociology, politics, & law.	Fac: Rutstein
c02	Geol 3xx: Conservation & Impact Studies. Environmental conservation & examination of environmental impact studies.	Fac: Egemeir
c03	Phys 108: Energy & the Environment. Physical laws relating to environment & energy utilization. Technological modification of environment, energy conservation, alternate sources of energy.	Fac: Konigsberg

2530 STATE UNIVERSITY OF NEW YORK COLLEGE AT ONEONTA
Oneonta, NY 13820

c01	Bio 100: Biology & the Citizen. Pollution, genetic manipulation, change, & population. Investigative nature of sci. & role of human thought in scientific problem solving.	b; f. Fac: JG Holway
c02	Phys 123: The Energy Crisis. Past, present, & future energy techs. with demonstrations of some of physical principles involved.	Holdren & Herrera Fac: A Read 7x; 15s; U

2540 STATE UNIVERSITY OF NEW YORK COLLEGE AT PLATTSBURGH
Plattsburgh, NY 12901

c01	Sci 301: Science & Society. Interactions of sci. with rest of society.	n Fac: S Worrall & others 150s; U

Colloquia/Lecture Series

1. Science & Society Browsing/Luncheon Seminar: for assorted faculty. Arranger: S Worrall.

2550 STATE UNIVERSITY OF NEW YORK COLLEGE AT POTSDAM
Potsdam, NY 13676

c01	CompSci 480: Legal & Social Aspects of Computing. Influence of computer revolution on society & vice versa.	b & ja Fac: staff

2560 STATE UNIVERSITY OF NEW YORK--EMPIRE STATE COLLEGE
Saratoga Springs, NY 12866

c01	Area of Study VIII. Science, Mathematics, & Technology. Interrelationships with or application of sci. & math to society & tech. Philosophy & history of sci.	

2570 STATEN ISLAND COMMUNITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
Staten Island, NY 10301

c01	CompSci 95: Computers & Society. Computerization & its impact on business, scis., humanities, & education. Social implications of use of computers.	

c02 Econ/Pol 12: Political Economy of the Environment.
Effects of accelerated technological advancement & economic growth on environment. Government & private efforts in US & abroad to formulate & implement environmental policies.

c03 MechTech/Soc 90: Technology & Society.
History of tech. & its effect on human social order. Specific social problems involving tech. from viewpoint of proposing solutions.
Fac: S Zimmerman, Nankiwell, Tufano

c04 XFBU 003: Science, Technology & Society.
Traces change from agricultural to industrial civilization as consequence of emergence of sci. as central part of life.

c05 Public Utilities & Society.
Vocationally oriented--to upgrade unemployed in public service operations & develop social awareness of problems.
Fac: Antonoupolos, Weiner

2580 SYRACUSE UNIVERSITY
Syracuse, NY 13210

p01 Engineering & Public Affairs (EPA)
p02 Program on Technology & Society (PTS)

c01 EPA 102: Introduction to Engineering & the Social Sciences.
Sci., applied sci., & tech. & their interrelationships. Nature of changes in society brought about by tech.

c02 EPA 511: Electric Power Generation & Distribution.

c03 EPA 522: Telecommunications & Society.

c04 EPA 531: Computers, Data Banks, & Human Affairs.

c05 EPA 585: Fuel & Energy Utilization.

c06 PTS/NAS 401: Seminar on Technological Problems.
Case studies in specific social issues involving tech.; critical assessment of specific developing techs., their environmental & social impact.
b & ja
Fac: N Balabanian, Teich
2x; 17s

c07	PTS/NAS 411: The Nature of Technological Society. Impact of tech. on modern society. Treatment of several important philosophical critiques. Possible responses to negative effects of tech.	b & ja Fac: N Balabanian 1x; 11s
c08	PTS/NAS 501: Social Aspects of Technology. Processes, problems, & policies arising from reciprocal impact of sci. & tech. on society, government, & public policy.	b & ja Fac: E Drucker, A Mazur 1x
c09	PTS/NAS 502: Science, Technology & Public Policy. Development, use, & control of sci. & tech. by American government.	b & ja Fac: H Lambright, P Rice PolSci 1x
c10	PTS/NAS 532: Progress & Technology. Philosophical & cultural underpinnings of concept of social progress. Implications for social policy & policy analysis. Disillusionment with progress by arts & scis. Alternative conceptions to replace progress as ideology & as social policy.	b & ja
c11	PTS/NAS 551: Alternative Futures for Technological Society. Possible effects of current trends on future of mankind. Exploration of different viewpoints regarding prospects for future & proposed plans for influencing future.	b & ja Fac: H Schwarzlander 2x; 14s
c12	Bio 205: Biology & Human Values. Biology & nature of man, quality of his life, threats to his survival, & direction of his future evolution.	Fac: Fondy
c13	Geog 307: Technology & Environment. Impact of technological development on human ecology; special attention to questions of public policy & quality of life.	Fac: Wilbanks
c14	PolSci 800: The Political Dynamics of Large-Scale Technological Programs. Interaction of policy, politics, & administration of ntl efforts aimed at moving the country toward specific social &/or technological goals.	Sayles & Chandler; Pressman & Wildavsky; Rourke; Lambright (1967; 1976); Sapolsky; ja. Fac: WH Lambright
c15	PubAd 730: Post-Industrial Administration. General review of literature on "post-industrialism" with emphasis on political/administrative aspects.	Boulding; Toffler (1970); Galbraith (1967); Bell; Etzioni; Schon; Cleveland; Drucker; Fuchs & Leveson; Bennis; Brzezinski (1970); Mansfield; ja. Fac: JD Carroll

c16 PubAd 930: *The City & Technological Change.*
Way in which tech. has impacted on the city, largely in unplanned ways, & how planned attempts to apply tech. to city are now taking place, for better or worse.
Bell; Bollens & Schmandt; Schon; ja.
Fac: JD Carroll, WH Lambright

c17 Rel 356: *Theology & the Environmental Crisis.*
Theological consideration of precarious relation of contemporary man to natural environment as this is affected by spiritual, intellectual, & technological evaluations of nature in western culture.
Fac: Kavanaugh

c18 Soc: *The Professional in Society.*

2590 UNION COLLEGE
Schenectady, NY 12308

Abbreviations: CED = Comprehensive Education Program

c01 CED 69: *Energy & Transportation.*
Effects of energy constraints on transportation; policies in conflict; energy & environment, government & industry; innovative transportation modes.
Fac: RK Mittal
MechEng
1x; 90s

c02 CED 81: *Society, Biology & Ethics: Conflict or Concord?*
Impact of recent findings & practices in life scis. upon previously accepted ethical, sociological, & moral judgments.
ja
Fac: WD Roth
BioSci
5x; 40s

c03 CED 84: *Technology, Society & Human Values.*
Effects of several major technological developments on organization of society &/or condition of the individual.
Vonnegut (1971); Michael; Truitt & Solomons.
Fac: GM Ketchum, RP Mason
MechEng, CivEng
4x; 12s

c04 CED 87: *Atomic Energy & Public Policy: the Nature of the Dilemma.*
Difficulties inherent in bringing a complex & hazardous technical process into service of society. Ecological, economic, & political aspects of problem.
Inglis; ja; f; av.
Fac: VE Pilcher
Phys
5x; 20s; Srs

c05 FE 62: *The Urban Transportation Crisis.*
Social, economic, aesthetic, & environmental impacts of automobile. Alternative schemes to meet short & long range goals.
Meyer, et al.; b & ja.
Fac: RK Mittal, RP Mason
CED, MechEng, CivEng
3x; 30s

c06	FE 63: Science & Society. Scientific aspects of man's use & misuse of natural resources & environment.	Ehrlich & Ehrlich; ja. Fac: LA Hull CED, Chem 2x; 18s
c07	FE 68: Electric Power & Future Energy Crisis. Society's use of electric energy: its production, transportation, storage.	Healy; ja. Fac: IV Ingvarsson CED, ElecEng 1x; 36s
c08	FE 70: Resources & Environment. Problems relating to resources & environment & ways of solving them.	SA (1973b); ja. Fac: HE Sheffer CED, Chem 4x; 17s

2600 UNIVERSITY OF ROCHESTER
Rochester, NY 14627

c01	Bio 191: Heredity, Evolution & Society. Philosophical, psychological, & social implications of biological laws.	Lerner (1968); ja. Fac: P Gross
c02	Chem 102: Chemistry in a Technological Society. Impact of modern chemistry on society: chemotherapy, fossil & nuclear fuels, environmental chemistry.	b & ja; f. Fac: T Krugh
c03	ChemEng 111: Science, Technology & Human Values. Ecological imbalance, arms race, cultural change, etc.	b & ja Fac: EP Goldberg
c04	Geol 219: Geology & Public Policy. Role of geology in developing public policies governing land & natural resource development.	McHarg; Tank. Fac: L Lundgren
c05	Geol 340: Environmental Decisions Seminar. Analysis of proposed actions to modify environments. Projects conducted with town & county agencies.	FR Anderson; Dales; Whyte. Fac: L Lundgren
c06	LibArts 212: Analysis of Selected Problems of Contemporary Society. Quantitative analysis of current problems: air pollution, population growth, traffic congestion, disarmament, urbanization, election mechanics, adaptation of technological innovation.	Fac: E Montroll

c07	Phil 222: Ethical Problems in Medicine. Human experimentation, abortion, death & dying, genetic engineering, allocation of scarce resources.	Fac: L Kopelman
c08	Phil 555: Philosophy of the Social Sciences. Sci. & its relation to philosophy--evaluation of importance of recent philosophical ideas for our understanding of man & his relation to society.	Fac: R Taylor
c09	Phys 194: Science & the Environment. Role played by physical scis. & tech. as causes of & cures for current environmental problems.	Fac: E Thorndike
c10	PolSci 210: Political Inquiry. Introduction to philosophy of sci. & scientific approaches to politics.	b; Kaplan. Fac: staff
c11	PolSci 222: National Security Policy. Problems of war & peace in nuclear age.	Brodie; Wohlstetter. Fac: J Mueller
c12	PolSci 506: National Security Policy. Problems confronting governments in nuclear age.	Fac: J Mueller
c13	Soc 196: Sociology Confronts Biology. Interaction of biological organism with personality, social structure, & culture.	Fac: G Cafferata, R Cafferata
c14	Soc 266: Medical Sociology. Role of medicine in society: role of sick, health professions, organization of health services, ethical issues.	Fac: Cafferata

2610 UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE & DENTISTRY
Rochester, NY 14620

c01	Selected Problems in Medical Ethics. In-depth study of selected problems, i.e., social & ethical issues in experimentation & consent, death & dying, euthanasia, behavior control, etc.	Fac: Kopelman

2620 VASSAR COLLEGE
Poughkeepsie, NY 12601

p01 Multidisciplinary Program in Science, Technology & Society (STS)

c01 STS 350a: The Freudian Left.
Marxian literature that has evolved from late writings of Freud.
b & ja
Fac: SW Rousseas
20s; U

c02 STS 351b: Revolution, Violence & the Moral Dilemma of Dirty Hands.
Nature of violence, moral problems it raises for political action in modern technological society, dilemma of dirty hands as central feature of politics.
b & ja
Fac: SW Rousseas, S Vromen
20s; U

c03 STS 352a: Science & the Social Order.
Sci. as social institution; influences of social, cultural, political, & technological forces on development of sci.
b & ja
Fac: J Challey
20s; U

c04 STS 353b: Science & the Future of Man.
Impact of sci., as social institution & body of knowledge, on man's environment & values.
b & ja
Fac: J Challey
20s; U

c05 STS 354a: Man & Society.
Problems of projecting humanism into highly developed society; problems of man as social being; role of intellectual & level of revolution; role of intelligentsia as social stratum.
b & ja
Fac: E Loebl
20s; U

c06 STS 355b: Society Building.
Attempt to work out socioeconomic model where tech. would serve man.
Matson; Dubos (1970); Niebuhr; Buber; Whitehead (1933); Chambliss; Harrington.
Fac: E Loebl
20s; U

c07 STS 356a: Science & Politics in Post-Industrial Society.
Critical examination of literature of post-industrial society with view toward understanding changing role of sci. & politics in contemporary American society.
b & ja
Fac: J Farganis

c08 STS 357b: The Dialectics of Liberation.
Relationship of knowledge & power examined through works of Frankfurt School. Conceptions of human nature, scientific knowledge, & political revolution explored within context of Max Horkheimer, TW Adorno, Marcuse, & Habermas.
b & ja
Fac: J Farganis
20s; U

c09 STS 358a-359b: Selected Problems in Urban Life.
Selected problems in urban life approached through theoretical materials & fieldwork.
b & ja
Fac: S Vromen, D Weinberg
20s; U

c10 ID 120a-121b: Contemporary Science.
Where sci. is today. Nature of investigation, roles of probability & statistics in natural scis., analogies between structural hierarchies in animate & inanimate universes, astrophysical anomalies, structure & function of ecosystem.
Fac: M Tavel
STS

c11 ID 280b: Bioethics.
Fac: RM Veatch
STS, Bio

Colloquia/Lecture Series

1. Seminar on the Nature of Consciousness: for faculty, associated colleges in area, IBM members. Arranger: J Challey, M Tavel.

2. STS Lecture Series: for college community. Arranger: SW Rousseas.

2630 WELLS COLLEGE
Aurora, NY 13026

c01 Bio 111: Human Biology & the Future of Man.
Impact of biological knowledge on aspects of human existence: sexuality, contraception, genetic manipulation, use & abuse of drugs, disease control.
Avers; Wertz; Fletcher (1974); HCR; f; av.
Fac: PA Sullivan

c02 Bio 112: Human Impact on the Environment.
Human intervention in natural ecosystems; human population growth, agriculture, energy use, pollution, environmental planning.
Ehrlich & Ehrlich; f; b & ja.
Fac: T Zorach

c03 Bio W262.
Similar to Bio 112.
ja
Fac: T Zorach

2640 WESTCHESTER COMMUNITY COLLEGE
Valhalla, NY 10595

c01 Bio: Problems in Pollution.
General causes of pollution, including philosophical, historical, cultural, economic, & sociological.

c02 Bio: Biological Science & Lab.
Major principles of biology integrated with contemporary living. Man's impact on natural & social environment.

c03 Science & Survival. — b & ja; Fac: T Morrison
What is sci.; philosophy of sci; sci., Christianity, & our cultural heritage; impact of sci.; sci. & man; sci. & government; sci. & morality.

NORTH CAROLINA

2650 BELMONT ABBEY COLLEGE
Belmont, NC 28012

c01 EnvSci 302: Man & His Environment. — b & ja; Fac: WH Hartford
Contributions of sci./tech., economics, sociology, political sci., & ethics to solutions of environmental problems.

c02 EC 304 (Geosci): Conservation of Natural Resources. — Park; Fac: J Hanahan
Ntl utilization policies; rights of industry, developing nations, & future generations.

2660 DAVIDSON COLLEGE
Davidson, NC 28036

c01 Chem 21: The Science of Chemistry. — Ja; f; Kieffer.; Fac: N Burnett
Chemistry & its relation to modern society.

2670 DUKE UNIVERSITY
Durham, NC 27707

p01 Engineering & Policy Sciences (EPS)
p02 Medicine & Public Policy Program

Abbreviations: PPS = Public Policy Studies
RSS = Religion & the Social Sciences

c01 CivEng 117: Public Systems Planning. — Fac: J Dajani
Systems approach to public policy planning. Estimation, forecasting, decision making.

c02 CivEng 216: Transportation Planning & Policy Analysis. — Fac: J Dajani
System evaluation techniques: social, economic, & environmental impact of transportation. Policy planning, decision making.

c03	CivEng 218: Engineering-Economic Analysis. Fundamentals of economic decision making for alternative engineering designs.	Fac: J Dajani
c04	Econ 53: Economics of Contemporary Issues. Modern economic problems, such as environmental deterioration & urban decay.	
c05	Eng/PPS 174: Technology Assessment & Social Choice. Engineering, economic, psychological, & ethical problems in designing technological systems. Citizen participation & feedback; impact evaluation.	Teich; Meadows, et al.; Mitre Corporation; b. Fac: DP Garg-Eng H Clark-Rel 24s; U
c06	Eng 180S-181S-182S: Transportation Policy. Ntl, state, & local tranportation policies. Role of tech. in decision making in transportation sector.	Fac: DP Garg, Behn
c07	Hist 151: Modern Technology. Western tech. in 19th & 20th C as related to political, economic, & scientific trends.	
c08	Hist 157-158: The Rise of Modern Science. Development of sci. & medicine, with attention to cultural & social influences upon sci.	
c09	MarineSci 104: Man & the Marine Environment. Economic, legal, medical, political, social, & scientific viewpoints on extent to which modern society has affected marine environment; emphasis on problems of coastal NC.	
c10	Nurs 97-98: Human Ecology I & II. Impact of changing physical & biological environment on man.	
c11	PPS 261S: Research Seminar: Health Policy I. Determinants & impacts of public policies designed to improve equity & efficiency of health services.	
c12	RSS 154: Ethics & Modern Technology. Emerging ethical issues created by impact of tech. on psychological, social, political, & economic life of modern man.	

c13 Soc 260: Science, Technology, & Society.
Sci. as social phenomenon. Relations of sci. to tech. & their articulation through public policy. Interaction of institutions of sci. with other societal institutions.

c14 Soc: Science, Politics, & Government.
Structure & values of the scientific community, the mechanisms & strategies of government, & their mutual interdependence in American society.
Fac: W Bevan-Psych
J McKinney-Soc

Colloquia/Lecture Series

1. Roundtable on Science & Public Affairs: for faculty & students.
Arranger: W Bevan.

2. Engineering/Policy Sciences: for university & local government community.
Arranger: J Dajani.

2680 LENOIR RHYNE COLLEGE
Hickory, NC 28601

c01 Core 100: Environmental Science.
Close relationship between man's scientific achievements & his environment. Energy crisis, pollution, & intensification of these problems by population increases & urbanization.

c02 Core 110: Computer Concepts.
Concepts of computer utilization; historical survey of development of computers & their application to & impact on society.

2690 NORTH CAROLINA STATE UNIVERSITY
Raleigh, NC 27607

c01 Chem 300: Chemical Technology & the Environment.
Provides basis for informed judgment regarding political, economic, & technical means to prevent/control pollution.
Fac: Hopfenberg

c02 Genet 301: Genetics in Human Affairs.
Relation of genetics to society & tech.
Fac: McKenzie, Voelker

c03 Mech&AeroEng 200: Mechanical Technology in Contemporary Society.
Role of mechanical & aerospace engineering in present technological society.

c04 UNI 301: Science & Civilization.
Scientific achievement & cultural impact of 3 different models of understanding the world & man's place in it: Ancient-Medieval model, 17th C model, 20th C model.

c05 UNI 302: Contemporary Science & Human Values.
Survey of some revolutionary developments in 20th C sci. & scientific method & their major intellectual consequences.

c06 UNI 303: Man & His Environment.
Fundamental concepts of ecology; impacts of tech. upon contemporary world environment; broad, humanistic aspects of our present environmental problems.

c07 UNI 402: Peace & War in a Nuclear Age.
Intnl issues facing US, particularly those reflecting impact of new tech.

Future Plans: design orientation, as contrasted with sci., in fields of civil engineering, mechanical, electrical, & industrial engineering, with strong emphasis on societal relations of tech.

2700 UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE
Asheville, NC 28804

c01 Phys: Toward the Year 2000.
Exploration of possible futures with emphasis on technological implications.

Burgess (1972); Ehrlich, Ehrlich, & Holdren; Huxley (1968); Meadows, et al.; Norman; Skinner (1948); Thompson; Toffler (1970; 1972); Vonnegut (1971).
Fac: JS Vinson
40s

c02 Phys: Energy Related Special Topics.

b & ja; f.
Fac: R Cole
25s

c03 Phys: General Physics.
Based on sci. & society topics.

b & ja; f.
Fac: J Vinson, R Cole
80s

2710 UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Chapel Hill, NC 27514

c01 Anthro 90: Biology, Society, & Culture.
View of human evolution, origin of life, synthesis of DNA, & current genetic theory for understanding man as social being & culture bearer.

Fac: staff
U

c02	BusAd 153/353: Social-Technical Systems. Cases & problems in socio-technical systems.	Fac: Adams
c03	CompSci 96: Man & Computers. Cultural, social, & economic effect of computers; value judgments related to computers; use of computers to model humans & human systems.	Gotlieb & Borodin; Martin & Norman; Pylyshyn. Fac: SM Pizer U
c04	EnvSci/Eng 51: Environmental Protection. Man-centered study of health, economic, ecological, & aesthetic effects of use of water, land, & air. Control & abatement of environmental degradation.	Fac: Chanlett, Okun
c05	EnvSci/Eng 111: Man & His Environment. Analysis of environmental problems & decisions from viewpoints of various disciplines concerned with assessment of risk, policy development, & environmental management.	Fac: Shiffman U
c06	EnvSci/Eng 183: Special Topics in Water. Nature of water resource, public objectives & policy issues, institutional arrangement, legal framework, planning & governmental agency programs.	Fac: Howells U
c07	Hist 118: War & Contemporary Society 1914-1965. Study of 3 modern wars including strategy & tech. involved as well as analysis of their social & political effects.	Fac: Leutze G
c08	Hist 169: Technology & 19th Century American Culture. Tech.'s impact on American thought & society & the responses it engendered.	Fac: Kasson U
c09	Hist 170: Technology & 20th Century American Culture. Impact of Henry Ford, tech. & mass culture, southern agrarians, bomb, space race.	Fac: Kasson U
c10	Phys/PolSci/Soc 37: Physics & Society. Impact of physics on society throughout history; emphasis on recent times.	Schroeer; b & ja. Fac: DK Schroeer & others 120s; U
c11	PolSci/Soc 179: Science & Policy. Problems of using expert knowledge in democratic policy formation.	Fac: DK Schroeer, D MacRae U, G

c12 Zool 20: Current Crises in Human Survival. Fac: staff
Biological, sociological, & ecological problems of man's survival. U

Future Plans: sci. policy might be subset of planned policy analysis curriculum.

2720 WESTERN CAROLINA UNIVERSITY
Cullowhee, NC 28723

c01 Anthro 3347: Cultural Change. — Dalton; b & ja. Fac: RM Byrnes
Emphasis on transformation of traditional societies through technological & other types of change.

c02 HSCC 3302: Medical-Legal Ethics. — Bally. Fac: J Bergner
Law & ethics as applied to health field.

c03 Nurs 3331: Health Care in Social Context. — Peterson. Fac: M Baker
Historical, social, & cultural context of health care delivery systems.

c04 Rel 4390: Science & Religion. — Jastrow; Barbour (1966; 1970); Weizsacker. Fac: R Swanson
Influence of natural sci. & religion upon each other in western civilization.

c05 Sci 4380: Science, Technology, & Society. — b & ja. Fac: JY Bassett
Interrelationships in sci., tech., & society; past, present, & future--for sci. teachers.

c06 Soc/Anthro 3561: Cultural Ecology. — b & ja. Fac: J Dorwin
Relationships between technological aspects of human cultures & their environments.

NORTH DAKOTA

2730 MINOT STATE COLLEGE
Minot, ND 58701

c01 SocSci 495: Social & Economic Problems in Environmental Change. — b & ja. Fac: staff
Economics of pollution & its effect on human social forms.

2740 NORTH DAKOTA STATE UNIVERSITY
Fargo, ND 58102

c01 Eng 300-301: Impact of Technology on Society.
Technological impacts as viewed by engineers.
Dorf (1974b); ja.
Fac: JL Jorgenson, T d'Errico, ML Forthun
4x; U

c02 PolScl 196: Science, Technology, & Public Policy.
Impact of technological developments on environmental issues, social programming of peoples & societies, & right of privacy.
ja
Fac: CA Amlund
1x

OHIO

2750 BALDWIN-WALLACE COLLEGE
Berea, OH 44017

c01 Phys 102: Topics in Physics.
Energy & the future, including economic, political, environmental, social, & aesthetic implications of energy production by various methods.
Wilson & Jones; Hammond, Metz, & Maugh.
Fac: RL Wallis

c02 Rel 263: Science, Technology, & the Christian.
b & ja
Fac: DG Proctor
R Stickford

2760 CASE WESTERN RESERVE UNIVERSITY
Cleveland, OH 44106

p01 History of Science & Technology (HSST)
Science, Technology & Public Policy

c01 HSST 201: Science in Western Thought I.
Survey of history of sci. from preclassical civilization to age of Newton.
Fac: RE Schofield

c02 HSST 251: Technology in Western Civilization I.
Technological developments throughout history; emphasis on man's attempts to control & master environment. Stress on socio-cultural factors, as well as technical elements, relating growth of tech. to social, economic, political, & cultural history.
Fac: ET Layton

c03	HSST 321: Science in America. History of sci. in America--scientific ideas & institutions, relations of sci. to society. Major scientific breakthroughs & impact on society.	Fac:	ET Layton RE Schofield
c04	HSST 363: American Technological Development. History of role of tech. in developing American civilization & on distinctive American contributions to technological developments.	Fac:	ET Layton
c05	HSST 364/564: Development of Industrial Society. Analysis of sources & structure of industrialization in Europe; impact of fabric of European society from industrial revolution to early 20th C.	Fac:	Jenkins
c06	HSST 410/510: The Industrial Revolution. Transformation of western society by means of tech. from 1760 to 1830.	Fac:	RE Schofield
c07	HSST 502: Science in Western Thought II. Survey of history of sci. from age of Newton to present.	Fac:	RE Schofield
c08	HSST 521: Seminar in Science in America. History of scientific thought & work in US. Research, education, organization, & popularization of sci. in America.	Fac:	ET Layton
c09	HSST 530: Scientific Revolution. Developments in sci. from Copernicus to Newton. Roles of continuing intellectual tradition & influence of Renaissance cultural attitudes in production of "revolutionary" ideas of sci. of this period.	Fac:	RE Schofield
c10	HSST 531: Natural Philosophy in the Age of Reason. History of 18th C scientific thought; emphasis on "experimental philosophy" of Britain, France, & Germany.	Fac:	RE Schofield
c11	HSST 561: Historiography of Science & Technology. Bibliography research methods & problems, history & philosophy of the history of sci. & tech.	Fac:	RE Schofield ET Layton

c12	HSST 563: Seminar in American Technological Development. Role of tech. in development of American civilization & distinctive American contribution to tech.	Fac: ET Layton
c13	HSST 565: Science & the Federal Government. History of relationship between American sci. & federal government; emphasis on social & institutional aspects.	Fac: ET Layton
c14	HSST 566: Seminar in American Technology & Public Policy. Interaction between tech. & public policy in America.	Fac: ET Layton
c15	Hum 203: Styles in Arts & Science. Ways in which form & content of painting, literature, music, philosophy, sci., etc. have changed with changing views of nature.	b & ja; av. Fac: staff
c16	Moral Problems in Medicine. Topics include: Issues involving mentally retarded; questions of value in psychotherapy; experimentation on humans; truth & information in medicine; death & dying; right to health care; eugenics.	b & ja; f. Fac: J O'Connor

2770 CASE WESTERN RESERVE UNIVERSITY SCHOOL OF LAW
Cleveland, OH 44106

c01	Law: Computers & the Law.	Fac: D Sloan 15s

2780 CLEVELAND STATE UNIVERSITY
Cleveland, OH 44115

c01	ClvEng 595: Society & Technology. Innovative methods of analyzing society's problems as they relate to tech.	b & ja Fac: C James & invited speakers
c02	Phys 191: Physics, Technology & Society. Interaction of physics & tech. with social problems.	b & ja Fac: CB Bratton, JD Walker
c03	Phys 208: Science & Religion. Interaction of ideas of 20th C physics with some of ideas of various religions, particularly those of eastern philosophies.	b Fac: IT Grodsky

2790 LORAIN COUNTY COMMUNITY COLLEGE
Elyria, OH 44035

c01 Hist/Sci 201: Ascent of Man. — Bronowski (1974)
Fac: J Huber-Sci
J Rakowski-Hist

c02 PhysSci 151-153. — Jeffries
Historical & humanistic course relating impact of sci. & tech. on society. — Fac: TW Jeffries

c03 PhysSci 161: Science & Society. — Fac: TW Jeffries

Colloquia/Lecture Series

1. Faculty Seminar on the Ascent of Man: for faculty. Arranger: TW Jeffries.

2800 MARIETTA COLLEGE
Marietta, OH 45750

c01 Bio 209: Plants & World Affairs. — b & ja
Origin, distribution of plants of economic importance; their influence on development of man. — Fac: RL Walp
30s

c02 Bio 315-316: Conservation. — b & ja
Human conservation; conservation of wild life, natural resources, fish, water, soil, etc. & effects upon social & economic development. — Fac: RL Walp
40-50s

c03 Chem 101: Chemistry & Modern Implications. — b
Elements of chemistry & description of chemical industry. Current areas of concern: air & water supply, food additives, energy. — Fac: HG Grose

2810 OHIO STATE UNIVERSITY
Columbus, OH 43210

Thyssen Science Policy Project/Goals for Global Society

c01 Anthro 510: Culture Contact & Technological Change. — Foster; Spicer.
Diffusion of Euro-American culture to folk societies; introduction of advanced tech. to underdeveloped areas. — Fac: D Hughes
20s

c02	Econ 206.03: Environmental Economics. Social & technological problems associated with energy production & use.	b & ja Fac: D Parsons-Econ T Sweeney-ChemEng Ix; 25s
c03	Econ 550: Economic Development. Long term economic changes in industrial structure, tech., & lack of ntl product in developing economies.	b & ja Fac: I Singh 30-40s
c04	Social & Behavioral Consequences of Technological Innovation. Interdisciplinary teams of students work on projects associated with siting of nuclear power plants.	Fac: G Smith-IndustEng R Brito-Econ W Li-Soc R Klimoski-Psych G Hunt-Comm S Lundstedt-PubAd D Van Meter-PolSci

2820 OHIO UNIVERSITY
Athens, OH 45701

c01	Eng: Energy & the Environment. Ramifications of energy in contemporary society. Preparation for effective participation in societal actions related to energy & power.	Fac: R Laurence
c02	Indust&SysEng: Engineering & the Technological Society. Technical inventions & social inventions; impact & social consequences of engineering; alternative features considered.	b & ja Fac: CM Overby
c03	MechEng 320: History of Western Technology. Significant technological innovations of western civilization from Greco-Roman period to 20th C. Interrelationships in history between tech. & society.	Klemm Fac: RA Laurence
c04	PhysSci 100A: Science & Society. Nature of sci. & its methods in obtaining knowledge & laws of our total environment.	b & ja Fac: JD Wilson
c05	Soc 469B: Experimental Sociology of Science. Theories & research concerning development & current features of sci. & social system in terms of individual contributing social commitment within structure, norms, & variance.	Fac: DE Sutherland
c06	UnivColl: Zero Population Growth. Sociological, religious, physical, psychological, & economic factors which favor & oppose zero population growth.	Fac: W Baasel

Future Plans: Professor C Overby, Indust&SysEng, has been involved, as member of executive committee of Government Relations Committee of the American Society for Engineering Education, in seeking ways to produce better articulation between engineering talent & legislative talent. He is presently working to establish an Engineering Student Internship in the Ohio State Legislature.

2830 UNIVERSITY OF DAYTON
Dayton, OH 45469

c01 EngMgmt 506: Engineering Management & Society.
Acquaints engineering manager with important governmental & societal dimensions affecting the design, fabrication, & production of engineering systems.

c02 EngMgmt 551: Policy Analysis & Planning in Public Systems I.
Attempt to organize disciplines & tools of general systems theory, systems engineering, future studies, & organizational development to meet demands of policy research & planning for complex large scale systems.

c03 EngMgmt 552: Policy Analysis & Planning in Public Systems II.
Continuation of 551 with emphasis on complete analysis of large scale public systems.

c04 MgmtSci: Technological Forecasting.
Martino
Fac: JP Martino

2840 URSULINE COLLEGE
Cleveland, OH 44124

c01 ID: Science, Technology, & Human Values.
Sci., tech., & social change. Emphasis on future sci. & tech. & their effects on individuals & social values.
p; ja; av.
Fac: team-taught by Sci Department

2850 WRIGHT STATE UNIVERSITY
Dayton, OH 45431

c01 Eng 141: Development of Engineering & Technology.
History & concepts of machine design & relations between machines & culture. Dependence of complex culture on machines that serve it.
Rapport & Wright; Omega East.
Fac: RF Rolsten

c02	Eng/Rel 300/Soc 302: Technology & Society. Important developments in engineering & tech. & their interrelations with society & human values.	Huxley (1968); White (1962); Morison; Meadows, et al.; de Nevers. Fac: RF Rolsten
c03	EnvStud 111. Historical perspective as it relates to interrelationship of parameters necessary to understanding of environmental crisis.	Ehrlich & Ehrlich Fac: T Wood & staff invited speakers
c04	EnvStud 112: Limits to Growth. Systems approach to study of environment--present conditions of environmental problems & projected directions.	Meadows, et al.; Mesarovic & Pestel. Fac: Sci & Eng faculty invited speakers
c05	EnvStud 113: Value System Alternatives for Society. Alternative social, economic, & political institutions: quantity or quality?	b & ja Fac: T Wood & staff invited speakers
c06	EnvStud 212: Environment & Man as a Social Being. Relationship between physical environment & man's behavior. Analysis of man's capabilities & limitations in design of man-environmental systems.	Sims & Baumann; Campbell & Wade. Fac: selected members of faculty & invited speakers
c07	EnvStud 213: Humanistic Perspectives of Environment. Impact of art, literature, philosophy, & religion on man's expression towards the environment.	Barbour (1973); Blau & Rodenbeck; Disch. Fac: LibArts faculty invited speakers

2860 YOUNGSTOWN STATE UNIVERSITY
Youngstown, OH 44555

c01	Bio/ChemEng/Soc 789: Man & the Technological Society.	Fac: HP Sheng-EngSci G Fry-SocSci G Kelley-LifeSci
c02	EnvStud 601: Introduction to Environmental Studies. Social & political aspects of environment.	Econ, Geog, PolSci, Psych
c03	EnvStud 602: Stresses on Environmental Quality. Population growth & concurrent technological development & their impact on quality of environment; consequences of past & present efforts on future use of resources.	Bio, Chem, Geol, Phys

c04 EnvStud 603: Man's Efforts to Relieve Environmental Stresses or Application of Technology to Environmental Problems.
Past, present, & future application of tech. to environmental problems.
ChemEng, MatSci, CivEng, EngTech

Colloquia/Lecture Series

1. 2 guest lecturers/yr. on man & technological society. Arranger: HP Sheng.

OKLAHOMA

2870 LANGSTON UNIVERSITY
Langston, OK 73050

c01 DataProc 2813: Role of Data Processing in Modern Life.
Role of data processing in society & effectiveness as educational tool.
b & ja
Fac: IH Ro-Tech
75s

2880 OKLAHOMA STATE UNIVERSITY
Stillwater, OK 74074

c01 Eng 2113: Science & Technology in a Modern Society.
Sci. of ideas students must understand to participate in decisions of age of tech.
ECCP (1968)
Fac: HJ Allison

c02 Eng/Hum 4060: Topics in Technology & Society.
Tech. related to problems of society & their solution.
Fac: PM Moretti, T Dean, J Dean

2890 ORAL ROBERTS UNIVERSITY
Tulsa, OK 74102

c01 NatSci 3053: Science & Society.
Interactions between sci. & society including past & present contributions of sci. as cause or cure of major problems in society.
p; ja.
Fac: LD Thurman & staff

2900 UNIVERSITY OF OKLAHOMA
Norman, OK 73069

p01 Science & Public Policy Program (SPPP) c01 CivEng 5623: Technological Forecasting & Demand Models.

c02 Eng 2243: Technology in Society I.
Application of engineering method of problem solving to current problems having sociological, economic, & technical aspects.
b & ja
Fac: LW Zelby
12s; U

c03 Eng 3423: Technology in Society II.
Analysis of major technological developments & their effect on society.
b & ja
Fac: LW Zelby
12s; U

c04 HistSci 4863: American Science & Technology.

c05 PolSci 4233: Science, Technology & Public Policy.
Impacts of sci. & tech. on US social/political system; how US makes policy for & manages sci. & tech.
D; Ford Foundation (1974b); Galbraith (1973); Reagan; ja.
Fac: DE Kash
20s; U, G

c06 PolSci 4553: Science, Technology & International Politics.
Impact of sci. & tech. on intnl politics.
Borgese; Brzezinski (1972); Ward & Dubos; r.
Fac: IL White
15s; U, G

c07 UnivCourse 3000: Evaluation of Environmental Impact.
Environmental impact assessment.
b & ja
Fac: L Canter, P Risser, et.al.
CivEng&EnvSci/Bot&Microbio
20s; U

Future Plans: (1) greater emphasis on energy utilization within College of Eng; (2) within SPPP, tech. assessments of energy resources, development of assessment methods & techniques, & continued development of interdisciplinary research management techniques.

2910 UNIVERSITY OF TULSA
Tulsa, OK 74104

c01 ID 2033: Science, Technology & Society.
Interrelationships of sci., tech., & society considered through studies of major problems faced by modern society.
b & ja
Fac: KM Jones & others
invited speakers
PhysSci
9x; 50s; U

c02 ID 3013: Technology Assessment.
Social & environmental consequences of technological developments; means by which efforts made to channel tech. in socially & environmentally beneficial directions.
Hetman
Fac: KM Jones & others
PhysSci
1x; 50s; U

OREGON

2920 OREGON INSTITUTE OF TECHNOLOGY
Klamath Falls, OR 97601

c01	AlliedHealth 213: Ethics & Jurisprudence. Professional ethics & legal status relative to public & individual.	Motley Fac: S Turner Dent
c02	BusAd 351: Environmental Law. Study & interpretation of federal & state regulations concerned with environment.	Tucker Fac: W Johnson
c03	BusAd 353: Industrial & Transportation Law. PUC laws, emission controls, application to public transportation & highway conditions.	Sampson & Farris Fac: A Peterson 30s

2930 OREGON STATE UNIVERSITY
Corvallis, OR 97331

c01	Chem 399: The Chemist in Contemporary Society. Current research interests & chemical applications to technological problems.	Fac: TD Thomas 2x; 20s
c02	GenlSci 311-312: Science & Society. Sociological history of sci. from 1600 to present. Development of sci. in relation to other social institutions; intellectual context of that development.	Fac: DP Jones, JE Morris 11x; 40s
c03	LifeSci 307/406g: Population, Resources & Environment. Focus ranges from contemporary local problems to ecological relationships in non-western world & their present & future implications for all human societies.	Ehrlich, Ehrlich, & Holdren; Fuller; Maddox; Meadows, et al.; LR Brown (1974); Schumacher.
c04	PolSci 488x: Politics & the Environment.	Fac: Shepard
c05	Rel 416x: Ethics & Ecology.	Fac: Clarke
c06	Univ 330: Bio-Ethics. Genetic defects, organ transplants, death, euthanasia, population explosion, mind & behavior manipulation, abortion, "dangerous knowledge."	Wertz Fac: Hovland, Cameron, Leman
c07	Zool 141: Human Heredity & Evolution. Application of genetic knowledge to human society--political, ethical, & humanitarian problems.	Fac: PS Dawson 4x; 50s

2940 PORTLAND STATE UNIVERSITY
Portland, OR 97207

p01 Futures Research Institute (FRI)
p02 Systems Science Ph.D. Program (SS)

c01 SS: Technological Forecasting I, II.
Fac: HA Linstone

c02 SS: Technology Assessment.
Fac: Goslin, HA Linstone

c03 SS: Sociotechnological Systems I, II, III.
One area of large complex systems studied in depth. Includes information systems, transportation systems, business systems.

c04 SS: Futures Seminar I, II.
Planning alternative futures & assessing interactions & implications which these choices involve. Values & goals, policy, strategies & tactics of implementation.
Fac: HA Linstone, Maruyama

Future Plans: current proposals under consideration are in areas of: (1) retrospective tech. assessment; (2) ranking of world problem priorities; (3) documentation of a new systems approach to major building construction; and (4) new systems approaches for food processing & distribution.

2950 REED COLLEGE
Portland, OR 97202

c01 Science, Technology & Values.
Treats contemporary problems related to sci., tech., & values in context of historical background from 18th C. Non-credit course for adults in community.
b & ja
Fac: RH Jones

2960 SOUTHERN OREGON COLLEGE
Ashland, OR 97520

Special classes not offered on regular basis:

c01 Bio 199: Bioethics.
Ethical problems involved in application of biological knowledge to individual & societal affairs.
b & ja
Fac: M Flower
32s

c02 Bio 407: Human Ecology.
Scientific perspectives on society's problems: population growth, food, pollution, conservation, etc.
b & ja
Fac: J Sullivan
77s

c03 Phys 310: Physics & Society.
Important discoveries in physics studied in terms of effects on our culture.
b & ja
Fac: E Stringer
20s

c04 Phys 310: The Energy Crisis.
Important discoveries in physics studied in terms of their effects on our culture.
b & ja
Fac: J Couch
20s

c05 ScMath 199 (Chem): Dwindling Resources.
b & ja
Fac: B Binder
121s

2970 UNIVERSITY OF OREGON SCHOOL OF LAW
Eugene, OR 97403

c01 Law 507: Computers & the Law.
b & ja
Fac: P Swan
1x; 15s

c02 Law 507: Law & Population Growth.
Westoff & Westoff
Fac: D Brodie
1x; 15s

2980 UNIVERSITY OF PORTLAND
Portland, OR 97203

c01 Comm 340: Technology & Communications.
Theories regarding past, present, & future impact of technological progress upon communications.

c02 Phil 462: Medical Ethics.
Basic principles of ethics & their apparent application to medical procedures & conduct.
Fac: Hund

c03 Theol 437: Religion & Science.
Study of religion, sci., & relationship between them.

2990 WILLAMETTE UNIVERSITY
Salem, OR 97301

c01 Environmental Economics.
Problems of environmental protection & natural resource utilization. Analysis of strengths & shortcomings of market mechanism, role of social sci., dimension of problem, possible solutions.
Schumacher; b.
Fac: R Beaton

c02 Religion & Science.
Relation of religious & scientific perspectives; tensions between mutual clarifications of Christian tradition & natural & social scis.
Barbour (1966; 1972)
Fac: J Hand

PENNSYLVANIA

3000 ALBRIGHT COLLEGE
Reading, PA 19604

c01	Sci 203-204: Science in the Modern World. Nature of experimentation & scientific knowledge. Relationship of sci. to human values & controversial issues of contemporary society.	Giddings; Newton; Barnett; Hammond, Metz, & Maugh; ja. Fac: WJ Birdsall 90s

3010 ALLENTOWN COLLEGE OF ST. FRANCIS DE SALES
Center Valley, PA 18034

c01	Bio 452: Senior Integrating Seminar. Effects on & responses to theological, philosophical, economic, political, & literary thought of New Biology.	b & ja Fac: E Halinan 1x; 15s; Srs
c02	Chem 452: Senior Integrating Seminar. World energy problem from viewpoints of economics, political systems, ethics, & sociology.	b & ja Fac: H Warren 1x; 5s; Srs
c03	Engl 291-292: Science & the Literary Imagination. Impact of sci. on focus, form, imagery, & symbolism of literature.	Brady & Price; Cadden; Butterfield. Fac: R Butler 2x; 50s
c04	Math 100: Computers & Modern Science. Impact & importance of computers in modern world.	Hare Fac: H Gordon 1x; 30s
c05	Phil 210: Introduction to Philosophy of Science. Introduction to modern philosophical reflection on scientific enterprise.	b Fac: W Sullivan 1x; 20s
c06	Phil 310: Society & Scientific Technology. Sci. viewed as aspect of man's historical & social development.	b Fac: W Sullivan 1x; 20s

3020 BUCKNELL UNIVERSITY
Lewisburg, PA 17837

p01 Technology & Society Program (TE)

c01	TE 100: Modern Technology. Engineering disciplines & relationship to society.	ja Fac: staff CollEng 7x; 15s

c02	TE 102: Civil Engineering for Society. Major branches of civil engineering & applications to current problems.	ja Fac: staff CivEng 6x; 10s
c03	TE 200: Building Mathematical Models. Concepts of models & applications in various disciplines.	ja Fac: J Pommersheim 1x; 5s
c04	TE 202: Simulation. Design of models for simulation. Analog & digital simulation methods.	Fac: E Mastascusa 1x
c05	TE 218: Technology & Social Change. Interplay of scientific, social, & technological changes in various historical eras.	Toffler (1970); Commoner; Faunce; ja. Fac: R Brungraber 2x; 50s
c06	TE 250: Introduction to Energy Systems. Introduces basic energy concepts & studies a familiar situation as an energy system.	ja Fac: C Coder 1x
c07	TE 251: Energy for the Future. Analysis of sources of energy & possible modes of utilization of these sources.	ja Fac: RC Walker 3x; 23s
c08	TE 260: The Environmental Dilemma. Nature & scope of pollution, relationship to human activity, & control techniques.	b; r. Fac: staff 3x; 26s
c09	Phys 137-138: Physics & its Cultural Implications. Classical & modern physics--impact on society, role in solving contemporary problems.	Marion (1973); Schroeer. Fac: V Drozin 3x; 25-30s
c10	UnivCourse 208: Environmental Pollution & Control. Technical aspects of water, air, & noise pollution & solid waste management.	Vesiland; ja. Fac: M LaGrega CivEng 1x
c11	UnivCourse 209: Cybernetic Integration of Knowledge. Introduction to cybernetic method & application to structuring of knowledge.	r Fac: V Drozin Phys 3x; 16s
c12	UnivCourse 252: The Sciences. Social, cultural, & conceptual structure of sci. examined through historical cases.	b & ja Fac: F Wilson Phil 4x; 15s

c13 UnivCourse 302: Biology, Academia, & Society.
Application of life scis. to understanding & possible solutions of certain social & environmental issues.
b & ja
Fac: R Ellis
Bio
2x; 16s

c14 UnivCourse 322: Ethics & Biomedical Technology.
Ethical principles & their application to current problems in biology & medicine.
b & ja
Fac: J LaBarge, H Magalhaes
Rel, Bio
1x; 14s

Future Plans: exploring possibility of Technology & Society major under B.A. degree program.

3030 CARNEGIE-MELLON UNIVERSITY
Pittsburgh, PA 15213

p01 Engineering & Public Affairs (EPA)
p02 Technology & Humanities (TH)

c01 EPA 19-201: Applications of Operations Research.
Role of operations research models in analyzing complex problems.
U

c02 EPA 19-222: Systems Analysis & Urban Problems.
Study & critical analysis of computer simulation models used to examine public policy questions associated with urban problems.
U

c03 EPA 19-311: Hazardous Product Analysis: Technology & Regulation.
Statistics & causes of product-related injuries; evaluation of regulation by government & industry; social responsibility of engineer in product design.
U

c04 EPA 19-319: Law & the Engineer.
Consumer, commercial, & environmental law studied from viewpoint of their effects on practicing engineer.
U

c05 EPA 19-321: Law & Technology.
Interaction of law & tech. in areas of environment, safety & health, product liability, & patents & trade secrets. Critical evaluation of nature & validity of technological input used in reaching public policy decisions.
U

c06	EPA 19-323: Products Liability. Role & effectiveness of technical expert in liability suit.	U
c07	EPA 19-401: Some Emerging Problems in Technology. Problems of society which will require technical ability to solve. Energy utilization, transportation, communication, data handling, & analysis of social systems.	U
c08	EPA 19-451-452: Engineering & Public Affairs Project. Interdisciplinary problem-solving projects in area of tech. & public policy.	U
c09	EPA 19-501: Special Topics in Engineering & Public Affairs. Special topics dealing with relationship between tech. & public policy.	U
c10	Hist: Evolution of the Engineering Profession: a Historical Perspective.	TH
c11	Hist: The Automobile & Society.	TH
c12	Hist: The History of Technology.	TH
c13	Hist: History of the American Environment.	TH, Eng participation
c14	SchUrbAffrs: Technology & Population Forecasting.	TH
c15	Eng: Science/Technology Interaction: a Perspective.	TH, Hist participation
c16	Eng/Hist: History & Goals of Research & Development Policy.	TH
c17	ChemEng 06-317: Problems & Prospects of Environmental Quality. Problem analysis: students perform specific problem definitions, invent & analyze alternative solutions, & evaluate costs & prospects for implementing those solutions.	U
c18	ChemEng 06-319: Fuels Processing: Technology & Public Policy. Overview of supplies & demand for major raw materials & fuel products. Relationships between tech. of fuels & public policy.	U

c19 CivEng 12-636: Environmental Impact Analysis. U
Problems & methodologies for detailed study of environmental management.

c20 CivEng 12-637: Urban Engineering Issues & Problems. U
Analysis of socioeconomical & technological issues influencing planning & design of urban spaces & facilities.

c21 Econ 73-452: Economics of Energy & Natural Resources. Fac: LB Lave
U
Modeling future demand for energy & natural resources.

c22 Hist 79-240: History of American Urban Life. Fac: MP Weber
U
Growth & development of American city, with special emphasis on impact of tech. on urban life & form.

c23 Hist 79-245: Ecology in American History. Fac: IH Bartlett
U
Ecological crises & controversy as central problem throughout American history.

c24 Hist 79-511: The Scientific Outlook. Fac: R Laudan
U
Social origins of scientists, role of sci. in war, relation between sci. & politics.

c25 Hist 79-514: Science & Technology in America. U
Interaction of sci. & tech. in making of American society examined from economic, social, cultural, & political viewpoints.

c26 ID 39-115: Nuclear Ecology. U
Discussion of peaceful applications of nuclear energy in context of society which must control its tech. for sake of preservation & improvement of environment as well as for survival.

c27 Metallurgy&MatSci 27-101: Impact of Materials on Society. U
Historical role & importance of materials; impact of specific material development on technological, economic, & sociological development of society.

c28 NuclSci&Eng 25-764: Environmental, Regulatory & Economic Aspects of Nuclear Power. G
Energy supply & demand; energy & fuel conservation; role of nuclear fuels in energy economy. Environmental & public health effects of nuclear power generation.

c29	Phil 79-661: Philosophy of Technology. Relation of sci. to tech.; way technological change can lead to conceptual crises; role of values in tech.	U
c30	Phys 33-515/Hum 79-515: Science in our Culture. Views of humanists & scientists on some of eternal problems of man. Historical development of scientific ideas; personal outlook & motivation of great scientists as revealed in non-technical writings.	U

Colloquia/Lecture Series

1. Program in Technology & Humanities Seminar Series.

3040 CLARION STATE COLLEGE
Clarion, PA 16214

c01	Chem 211: Science & Society. Basic concepts for informed laymen. Consideration of representative problems.	Giddings & Monroe; Miller (2); ja. Fac: JA Laswick

3050 DICKINSON COLLEGE
Carlisle, PA 17013

c01	Bio 105: Biological Aspects of Contemporary Problems. Biological basis of contemporary problems such as human reproduction & population, pollution, drugs, etc. Natural & man-made limitations involved in these problems.	b & ja Fac: staff 2x; 30s
c02	EnvStud 111: Environment, Culture, & Values. Effects of scientific, religious, philosophical values on man's attitudes toward environment & how these attitudes may effect way of life. Alternative world models.	b & ja Fac: staff 2x; 20s
c03	Sci 261: Contemporary Science. Problems of energy, communication, & population in relation to quality of environment & human life.	b & ja 8x; 30s
c04	Sci 262: Contemporary Science. Development of those concepts that relate to our knowledge of matter with reference to chemistry of earth & to contemporary sci. & its implications for man.	b & ja 8x; 30s

3060 DREXEL UNIVERSITY
Philadelphia, PA 19104

c01	C004: Management & Technology. Core course for MBA students in College of BusAd.	b & ja Fac: A Verzilli-Econ A Shostak-Soc DB Smith-EngMgmt CO Smith-Hist JA Raffaele-Mgmt G
c02	S305 (Hist): Technology in Historical Perspective.	b & ja Fac: CO Smith U
c03	S307 (Pol): Science, Technology & Public Policy.	b & ja Fac: M Sullivan
c04	S309 (Soc): Social Implications of 20th Century Technology.	b & ja Fac: AB Shostak

70 DUQUESNE UNIVERSITY
Pittsburgh, PA 15219

c01	Chem 102: Chemistry & Society. Significance of developments in chemistry as seen in immediate benefits to man & long-term impact on society.	Seager & Stoker Fac: Glaid, J Hausser
c02	Hist 307-308: History of Science. Significance of scientific developments within historical & social context of western culture.	Brecht; Kearney; Eiseley (1961); Watson; b. Fac: A Costa, D Engle
c03	Hist 367: The Impact of Science on Society. Economic, social, & cultural consequences of rise of modern sci.	Rose & Rose; Olson; b & ja. Fac: A Costa
c04	Hist 542: The Scientific Revolution. Scientific change from Copernicus to Newton & effects on literature, philosophy, religion, & society.	b Fac: A Costa G

Mini-courses:

c05	Chem/Phys 115-61: Energy Resources. Energy capabilities & prospects for future.	Fac: Carl, Sanders, Deul, Yavorski, Larson, Forscher, Perry
c06	Hist/Phys 123: The Universe & Man in the Space Age. Man & his future in relation to perspective on the milleniums of the past.	Fac: I Velikovsky

c07 PolSci/MilSci 119-61: The Energy Crisis: Implications for National Strategy.

c08 PolSci/MilSci 121-61: The Impact of the Economic Crisis on National Defense.

c09 Soc 130: Future of Society. Fac: A Shostak

Colloquia/Lecture Series

1. Mini-courses--Pittsburgh Council of Higher Education: for faculty, students, general public. Students can register for credit. Lectures free & open to public on non-credit basis.

3080 DUQUESNE UNIVERSITY SCHOOL OF LAW
Pittsburgh, PA 15219

p01 Product Liability: An Interaction of Law & Technology

c01 Law: Products & the Consumer. Legal & societal significance of concept of strict liability & the technological impact in the area.
Fac: WA Donaher & guest lecturers
5x; 75s

c02 Law: Environmental Law. Legal, economic, & technological problems of environmental quality control.
Fac: R Broughton
8x; 50s

Future Plans: (1) course in "Trial Tactics in Products Litigation"; (2) joint degree programs, at graduate & undergraduate levels, with Carnegie-Mellon University's Institute of Technology.

3090 EAST STROUDSBURG STATE COLLEGE
East Stroudsburg, PA 18301

c01 Bio 104: Human Ecology. Man, his environment, & social problems.
Ehrlich & Ehrlich; ja; f.
Fac: staff & invited speakers
2x

Future Plans: developing small-scale energy techs. related to alternative energy sources (methane, wind, solar); developing proposals for 19th C living farm museum to incorporate existing local resources.

3100 FRANKLIN & MARSHALL COLLEGE
Lancaster, PA 17604

c01	Bio 1Q: Biosocial & Environmental Problems. Effects of medicine, tech., & population pressures upon genetic fitness of man & upon environment.	Murdoch Fac: KR John, JL Richardson
c02	Econ/Geol. Economic evaluation of alternative public policies for solving environmental problems.	Fac: S Long, J Moss U
c03	Geol 16: Geology & Man. Interrelationship of geologic, economic, political, & philosophical factors involved in solving man's environmental problems related to solid earth.	Cargo & Mallory; Udall. Fac: J Moss 15-20s; U
c04	Hist 52: Aspects of Scientific Thought--Scientific Thought, Technology & Society.	Vonnegut (1971); Schiller; Rousseau; K Marx (1967); Weber; Ellul (1964); Marcuse; n.s.: Fourier, de Saint Simon. Fac: S Wank 1x; U
c05	Hist 72: Attitudes Toward Science & the Scientist Movement in the 19th Century. Examination of attitudes of major 19th C thinkers toward natural sci. & toward general scientist movement.	Mill (1957; 1961); Engels (1940, 1972); Meek; Ruskin; Zola; Flaubert (1953; 1971); Strauss; Nietzsche (1897; 1968; 1974); Arnold. Fac: S Wank U
c06	RelStud 31: Religion & Science: Meditation & the Mind. Meditation & other altered states of consciousness from various scientific & religious perspectives.	Tart; Wooldridge; McCartney; Lilly; Delgado; Skinner (1971). Fac: TJ Hopkins U

Future Plans: possible development of formal program in history & philosophy of sci. Course to be taught by economist & geologist which will combine knowledge of scientific background of selected environmental problems & economic evaluation of alternative public policies for solving those problems. Areas may include water pollution, oil & energy alternatives, evaluation of proposals for no-growth society, & nuclear power. To be taught by Professors Long & Moss.

3110 GENEVA COLLEGE
Beaver Falls, PA 15010

c01	CompSci 100: The Computer & Society. Functions of computer in business, industrial, & sociological processes of society; consideration of ethical problems.	b & ja Fac: WP Arnold 4x; 25s; U

3120 KING'S COLLEGE
Wilkes-Barre, PA 18711

c01	AmerStud 48: Varieties of Realism. Relationships between tech. & sci. on one hand & literature, art, & society on other.	Hoffman; b & ja. Fac: C Valletta Engl 8x; 15-20s; U
c02	EcoLit 25: Values & Literature. Interrelationships between sci. & impact on man's artificial & social environment as revealed in literature & architecture.	Conron; Orwell (1972); Fitch. Fac: C Valletta Engl 3x; 25s; U
c03	Hist 84: Bronowski's Ascent of Man. Processes of thought & imagination involved in various attempts by man to analyze & understand nature of universe & himself.	b & ja; f; av. Fac: D Farmer 1x; 12s; U
c04	Honors 10: History of Western Science. Interrelationship of sci. with philosophy & religion.	Dampier; FS Taylor; SA (1957). Fac: W Drumin Phil 1x; 8s; U
c05	Honors 34: The Energy Crisis. Economic & scientific background of energy crisis.	b & ja Fac: J Rakowski, T Arnold Econ, Phys 1x; 7s; U
c06	Honors 34: Technology & Society. Interaction between tech. & society.	b & ja Fac: B Horwitz & guest speakers 1x; 13s
c07	Phys 1: Physics & the Technological Society. How various technological elements interact with each other & influence our society.	b & ja Fac: B Horwitz 3x; 20s; U
c08	Theol 24: Medical Ethics. Ethical & moral problems in medical practice, health care, & life scis.	JB Nelson; HC. Fac: P Muntzel, J Doyle 4x; 60s; U

Colloquia/Lecture Series

1. Bioethics: for hospital personnel. Arranger: H Nardone.

Future Plans: course on computers & society.

3130 KUTZTOWN STATE COLLEGE
Kutztown, PA 19530

c01 Bio 140: Biology & Society.
Application of principles of biology to man as social organism. Relevant biological aspects of genetics, evolution, behavior, & physiology in context of today's world.
b & ja
Fac: staff

c02 EnvSci 101: Environmental Studies I.
Problems of population growth, resource adequacy, & energy use in relation to their singular & joint effects on social & natural worlds.
b & ja
Fac: staff of Bio, PhysSci, PolSci, & others

c03 Phil 150: History of Scientific Ideas.
Scientific ideas from their origin; relations between philosophy & sci. through history.
b & ja; r.
Fac: staff

c04 PolSci 225: Planning & Decision-Making Theory.
Modern techniques of rational decision-making with special attention to applying them to environmental problems.
b & ja
Fac: staff

Future Plans: work in area of telecommunications.

3140 LAFAYETTE COLLEGE
Easton, PA 18042

c01 EngSci: Foundations of Modern Technology.
Historical development of technological method. Socio-technic interactions in history.
Klemm; Burke.
Fac: CL Best
6x; 17s

c02 EngSci/Govt: Technology & Public Policy.
Study & evaluation of mechanisms for transferring technical advice to public policy decision making.
b & ja
Fac: CL Best-EngSci
RN Kelson-Govt

c03 Phil: History of Science.
Historical impact of scientific interpretations on formulation of world views.
Mason; Westfall; Gillispie (1960).
Fac: J Losee
8x; 22s

c04	Rel: Religion in a Scientific Age. Ways in which religious & scientific world views challenge or qualify each other.	b & ja Fac: J Zuck 4x; 20s
c05	Computers & Society.	

3150 LEHIGH UNIVERSITY
Bethlehem, PA 18015

p01 Humanities Perspectives on Technology (HPT)
p02 International Science & Technology Affairs (ISTA)/Transnational Dimensions of International Studies (TDIS)

c01	HPT 6: Machine in Modern America. Explores rapid intrusion of sci. into many areas of American life & consequent change in traditional techs.	Fac: C Pursell 1x; 40s; U
c02	HPT 97-98: Humanistic Perspectives in a Technological Society. Poses fundamental question of preservation of human values, personal & social, in face of unprecedented rise of tech.	de Nevers; Teich; Rochlin. Fac: staff from Classics, ModernHist, ChemEng Classics, ModernHist, ChemEng 2x; 50s; U
c03	HPT 398: Science, Technology, & Religion. Comparison & examination of assumptions, methods, & theories of sci./tech. & religion from historic & contemporary perspectives in order to gain more humanistic framework for decision making in the scientific/technological enterprise.	Fac: H Flesher, W Kraft
c04	CC 104: Technocracy & its Critics. Using Marcuse as starting point, course pursues roots of opposition to "technocratic" society as illustrated in "irrational" criticisms of Utopians & Millenialists.	Fac: J Dowling HPT, Hist 1x; 20s; U
c05	Engl 91: The Literature of Environment. Contemporary non-fiction in which concern with ecological problems merges with recognition that ours is an urban society. Suggests there is room for both exhilaration of nature & amenities of civilization.	n.s.: Rachel Carson, Paul Goodman, Loren Eiseley. Fac: R Harson HPT 2x; 21s; U
c06	Engl 197: The Myth of Knowledge. Explores plays about men who sought to master fields of knowledge to discover abstract truths or gain power over universe. Perception of knowledge & fate of its controllers (scientists).	n.s.: Cassirer, Jung, Levi-Strauss; plays of Sophocles, Marlowe, Shakespeare, Ibsen, Brecht, Handke, Morzek, Beckett. Fac: E Fifer HPT 2x; 12s; U

c07	Engl 197-198: Utopia: Fantasy & Reality. Comparison of various aspects of fictional utopias to modern utopian experiments.	b Fac: R Harson HPT 2x; 15s; U
c08	Engl 197-198: Science Fiction. Role as creator & reflector of attitudes toward scientific & technological advances.	b Fac: E Gallagher HPT 2x; 90s; U
c09	Engl/Phil 198: Media & Values. Interplay between media & values, way in which 2 are formed & reformed in their mutual interactions.	Fac: G MacDonald-Engl T Haynes-Phil HPT 2x; 50s; U
c10	Engl 397-398: Fiction & the Technological Vision. Impact of new spatial & temporal perspectives on 20th C fiction.	Joyce; n.s.: Kafka, Beckett, Robbe-Grillet, Hawkes, Lowry, Barth, Borges, Woolf, Faulkner, Dos Passos, Stein. Fac: J Frakes HPT 2x; 25s; U, G
c11	FineArts 197: Sculpture & Technology. Studio course utilizing methods, materials, & tech. of various laboratory disciplines to examine aesthetic applications to 3-dimensional form.	Fac: T Althouse HPT 2x; 15s; U
c12	FocalAreaWorkshop #1: Life & Work Habitat. Acquaints faculty with thought & method of faculty in other disciplines as they approach common topic; explores interdisciplinary courses.	b & ja HPT 1x; 31s/13F; U, G, F
c13	FocalAreaWorkshop #2: Potential Problems in Computer & Information Technology. Case study experience: faculty/student teams develop & share humanistic perspectives on implications of technological advance in field of computers.	b & ja Fac: E Gallagher HPT 1x; 18s/6[illegible], U, F
c14	FocalAreaWorkshop #3: Women in Engineering. Women in engineering profession; relationship of women to tech. in America.	b & ja Fac: C Pursell HPT 12/6F
c15	Govt 398: Media, Technology, & Politics. History of mass media use in American politics, political theories, tech. assessment of cable/computer communications in politics, impact of CATV on politics & society.	Fac: C Brownstein HPT 1x; 15s; U
c16	Hist 8: The Machine in America to 1900. Social history of American tech. from 17th C to 1900.	L Marx; Rosenberg. Fac: C Pursell HPT 1x; 40s; U

c17	InfoSci 11: Computer Programming for the Humanities. Introduction to fundamentals of computer programming with emphasis on requirements of humanistic applications.	Fac: D Hillman HPT 2x; 20s; U
c18	InfoSci 12: Computer Applications in the Humanities & Social Sciences. Applications of computers to studies in humanities & social scis.	Fac: D Hillman HPT 2x; 20s; U
c19	Latin 204: The Ancient City. Ancient cities seen through concepts of human community & political theory as compared with archaeological findings, ancient theories of city & city-planning; insights applicable to current urban problems.	Mumford (1961); Plato. Fac: D Feaver HPT, Classics 3x; 15s; U
c20	Music 197: Electronic Music. Electronic music designed to allow students to pursue musical achievements with SYNTHI AKS & Lehigh-constructed synthesizers.	Fac: J Brown HPT 2x; 12s; U
c21	Phil 97: War & Non-Violent Alternatives. Analysis of necessity & justification of continuing traditional techniques of intnl coercion in era of advanced weapons tech.	Fac: R Lindgren HPT 2x; 45s; U
c22	Psych/Engl 197: Leisure in a Technological Society. Relationship between work & play in post-industrial society.	Fac: D Mankin HPT 2x; 35s; U
c23	Psych 197: Electronic Vision: the Contemporary Media of Sight. Impact of tv tech., how it affects interpersonal relations, issues of privacy, etc. Alternatives to current production systems.	Fac: W Newman HPT 2x; 30s; U
c24	Psych 298: Futuristics. Need for future planning; futuristic analysis of selected potential developments.	Cole, et al.; Meadows, et al.; Huxley (1968; 1972). Fac: D Mankin HPT 2x; 35s; U
c25	RelStud 203: Technology & Religious Thought. Understanding & assessment of our technological society with aid of contemporary theologians & social scientists.	Barbour (1970; 1972); Cox. Fac: AR Eckardt HPT 2x; 10s; U
c26	SocRel 398: The Technological Determinism Debate in Anthropology. Pro & con technological growth.	Fac: B Frankel HPT 1x; 5s; U

c27	IR 41: Science, Technology & International Relations. Examination of intnl dimensions of selected techs. & scientific fields & their impact on intnl political system.	ja Fac: ZJ Slouka & faculty from OceanEng, Geol, Chem, Bio TDIS, HPT 3x; 40s; U
c28	IR 47: Transnational Relations & World Politics. Examination of role of transntl (non-governmental) forces in intnl system, with dominant emphasis on transntl networks in sci. & tech.	Fac: ZJ Slouka & others TDIS, HPT 1x; 40s; U
c29	IR 97: Oil & Politics. Development of major intnl oil companies & their relationship with consumer & producer governments in management of energy resources & transfer of energy-related tech.	Sampson; Odell. Fac: MR Hodges TDIS 1x; 200s; U
c30	IR 301: International Policy-Making. Decision making in functional intnl organizations with emphasis on role of scientific & technical expertise.	Cox & Jacobson; t & ja. Fac: ZJ Slouka TDIS 25s; G, Ucl
c31	IR 304: The Multinational Corporation as an International Actor. Economic, political, & social role of multintl corporations in intnl system; multintl management of tech. & tech. transfer.	Barnet & Muller; Ball. Fac: MR Hodges TDIS 1x; 25s; G, Ucl
c32	IR 362: International Law & Technological Change. Processes of intnl law-making through study of intnl regulatory activities in areas of major technological change.	b & ja Fac: ZJ Slouka TDIS 2x; 50s; G, Ucl
c33	IR 461-462: Seminar: International Law & Technological Change. Impact of technological change on intnl regulatory institutions, especially law & intergovernmental organizations.	Fac: ZJ Slouka ISTA 4x; 6s; G
c34	IR 471: Seminar: International Marine Technology Affairs. Interplay between marine scis. & techs. & intnl political system. Tech. assessment approach.	Fac: ZJ Slouka-IR AF Richards-Geol/Eng associated faculty ISTA, CivEng 2x; 18s; G, Srs
c35	IR 472: Seminar: Transnational Dimensions of Science & Technology. Transntl aspects of various fields of specialization within university. Inquiry into function of "knowledge networks" in intnl relations.	Fac: ZJ Slouka-IR AF Richards-Geol/Eng associated faculty ISTA 1x; 12s; G, Srs

c36 Engl 198: Self Reliance in a Technological Society.
Theory & practice of self reliance in today's world.
Fac: P Beidler
15s

c37 FS 97-98 (GeolSci): Resources & the American Life Style.
Global distribution of resources, extraction tech., present realities of intnl politics; comparison of life styles within, & viability of, agrarian & mineral based economies.
Fac: J Sumner
6x; 20s; U

c38 Hist 398: The American Engineer.
Social history of development of engineering profession from early republic to present.
Fac: C Pursell
1x; 10s; U

c39 Hist/Journ 398: The Science-Technology Establishment & its Critics.
Inner workings of US sci.-tech. establishment & criticism of it by scientists, nonscientists, & press. Public image of sci., tech. assessment, politics of environmental policy.
Fac: S Friedman, C Pursell

c40 Phil/Psych 98: Behavior Control & Human Values.
Examination of concept of behavior control together with actual applications in prisons, mental hospitals, & schools: what it is, how it works, whether conflicts with strongly held values.
av
Fac: A Brody, N Melchert
80s

c41 Phil 197: Medical Ethics.
Application of philosophical thinking to subjects of medical ethics & bioethics.
Fac: J Hare

c42 Psych 251: Psychological Perspectives in a Technological Society.
Relationship between tech. & problems of society with emphasis on social & psychological environment.
Fac: D Mankin
3x; 35s; U

c43 Psych 368A: Hunger--Challenge to Man.
Exploration of world food situation & examination of biological & psychological effects of starvation & of deficits of specific nutrients. Consideration of efforts to ameliorate & prevent malnutrition within matrix of ideological, economic, political, & technological realities.
Fac: J Brozek

c44 SocRel 131: Science, Technology, & Society.
Relationships of sci. & tech. to social life.
Fac: R Herrenkohl
20s

Colloquia/Lecture Series

1. Lecture Series on Humanistic Perspectives on Technology: for university community. Arranger: E Gallagher.

Future Plans: (1) HPT is developing a minor in "Technology & Human Values"; (2) formal concentration on Science, Technology, & Public Policy within graduate program in PubAd (Master of PubAd) is being developed.

3160 LOCK HAVEN STATE COLLEGE
Lock Haven, PA 17745

c01 Science & Society.
p; av.
Fac: H Williamson, A Gray, P Kline

3170 MERCYHURST COLLEGE
Erie, PA 16501

c01 ID 130: Environmental Problems.
Problems of environment from viewpoint of morality, sociology, economics, & sci.

c02 ID: Science & Technology & Man.
Fac: A Pierotti, C Kuntz
1x; 50s

c03 Pol 124: Environmental Law.
Legal problems involved in ameliorating environmental crisis; present & potential role of law.

c04 Futuristics.
Ethical implications of developments in biology.
Fac: R Tipton, D Blanchfield
3x; 40s

3180 NORTHAMPTON COUNTY AREA COMMUNITY COLLEGE
Bethlehem, PA 18017

c01 EnvStud 101: Man & the Environment.
Nature of selected environmental problems with emphasis on personal & social values related to environmental conservation.
Fac: R Horner, R Ziegenfus
6x; 35s

3190 PENNSYLVANIA STATE UNIVERSITY ALLENTOWN CAMPUS
Fogelsville, PA 18051

c01 Hum 101: Modern Science & Human Values.
Relationships of sci. to aspirations, values, & arts of man.
b; f; av.
Fac: RN DeVinney

3200 PENNSYLVANIA STATE UNIVERSITY
University Park, PA 16802

p01 Science, Technology, & Society Program (STS)

Abbreviations: ERM = Environmental Resource Management
MER = Division of Man-Environment Relations

c01 STS/Phil 107: Man & Technology.
Human freedom, moral choice, concept of human nature; types of value experiences as they relate to processes of contemporary life; technological forms of thought & society.

b
Fac: R Heinsohn-MechEng
D Verene-Phil

c02 STS 198: Wilderness & Technological Man: Values, Policies, & Decisions.
Where values of humanities & tech. come into conflict; possible grounds for preservation of wilderness.

b
Fac: R Bortner-HumDev
C Humphrey-Soc
R Price-Phil
1x; 22s; U

c03 STS 198C: The Ascent of Man.
Critical historical analysis of interactions of sci., tech., & society based on tv presentations of J Bronowski, in coordination with WPSX-TV.

Fac: W Swoboda, G Lundgren, STS faculty, associates
2x

c04 STS 198E: The Behavioral Revolution.
Critical introduction to techs. of behavior control, its promises & dangers, in coordination with 5 tv programs produced by WPSX-TV.

1x

c05 STS 400: Independent Study.
Relationships of sci., tech., & society.

c06 STS/Eng 410: Technology: Its Character, Role, & Function.
How tech. operates, past & present; how human needs are cast as design specifications; how devices & processes are created.

b
Fac: R Heinsohn-MechEng
D Parke-MechEng
2x; 9s; U, G

c07 STS/EMSc 420: Energy & Modern Society.
Tech. & economics of energy resources; environmental effects, possible exhaustion, & new techs.

Fac: R Gordon-MineralEcon
F Vastola-FuelSci
1x; 6s; U

c08 STS 430: Food & Man.
Technological advancements in food production, their influence on man's social & economic development; world food resources & population.

Fac: H Cole-PlantPath
R Cunningham-SoilGenesis& Morphology
J Patrick Madden-AgEcon
S Patton-Ag
K Wilkinson-RuralSoc
3x; 17s; U, G

c09	STS/Phil 432: Medical Ethics. Moral & political aspects of medicine.	b Fac: R Price-Phil S Goldman-Phil
c10	STS 435: The Interrelation of Science, Philosophy, & Religion. Historical & transformative effects of sci. on western philosophical & religious views of man, nature, & god.	b Fac: G Fleming-Phys S Goldman-Phil 2x; 11s; U
c11	STS 450: Technological Change: Its Production, Diffusion, & Impact. Processes through which technological change is generated & diffused throughout society.	
c12	STS 460: Science & Public Policy. Importance of sci. policy in modern societies & mechanisms & processes by which it is made.	Fac: G Brandow-RuralSoc R Roy-SolidState 1x; 14s; U, G
c13	STS 470: Technology Assessment & Indicators of the Quality of Life. Effects of technological developments & methods for indicating their costs & benefits to society; methods for projecting future societal trends. Moral & ethical issues in public policy.	b Fac: R Price-Phil T Vallance-HumDev 2x; 10s; U, G
c14	STS 471: Radiation, Reactors & Society. Societal problems & benefits associated with nuclear power.	b Fac: E Klevans-NuclEng M Schultz-NuclEng 2x; 13s; U, G
c15	STS(LA) 480: Technological Change & Human Values. Interrelationship between technological change & human values.	b
c16	AgEcon 422: Land & Water Resource Policy. Economic framework of resource policy; applications of economic analysis to resource policy programs.	b & ja Fac: D Jonsma or A Daugherty
c17	ERM 300: Junior Seminar. Resource management decision making.	ja Fac: D Epp-AgEcon invited speakers 1x
c18	ERM 411: Legal Aspects of Resource Management. Introduction to law, legal framework of resource use & planning, & controlling resource use.	ja Fac: B Myers-BusAd

c19	ERM 413: Case Studies in Ecosystem Management. Application of biological, physical, & social sci. principles to decision making in selected management problems. Environmental impact assessment.	b & ja Fac: J White-AgEcon faculty from CollAg visiting speakers
c20	Hum 101: Modern Science & Human Values. Relationship of sci. to aspirations, values, & arts of man.	b Fac: W Miller-Chem/Hum 30s; U
c21	MER 100: Introduction to Man-Environment Relations. Introduction to interaction between man's behavior & the environment.	Moos & Insel Fac: PB Everett
c22	MER 101: Issues in Man-Environment Relations. Systems analytical framework for understanding human social problems dealing with energy, resources, matter, time, & diversity.	Greenwood & Edwards; Garvey. Fac: G Bazan
c23	MER 505: Environmental-Behavioral Programming, Design, & Management. Application of findings in behavioral scis. to environmental design & management strategies.	Fac: RG Studer 8-10s; G
c24	MER 512: Behavior Analysis of Environmental Problems. Analysis of behaviors contributing to environmental dysfunction. Behavior change strategies proposed to deal with transportation, pollution, overpopulation, etc.	Fac: PB Everett 8-10s; G

Colloquia/Lecture Series

1. Two Cultures Dialogue: faculty level monthly dialogues to facilitate understanding across disciplinary lines. Periodic workshops, colloquia, & conferences with private sector organizations such as churches, labor unions, service clubs, etc. Arranger: R Roy.

2. Student Cross-Cultural Dialogues: for students. Arranger: R Roy.

Future Plans: (1) person-to-person problem-solving & information dissemination service with secondary use of computer being developed by R Roy; (2) STS Steering Committee developing one credit modular courses, both new courses & courses distilled from existing STS courses, for both on- & off-campus delivery.

3210 MILTON S HERSHEY MEDICAL CENTER OF THE PENNSYLVANIA STATE UNIVERSITY
Hershey, PA 17033

c01	Hum 705: Dying, Death, & Grief. Death examined as event & concept; emphasis on clinical care for dying patients & their relatives.	b Fac: EA Vastyan 8x; 30s
c02	Hum 725: Medicine & Ethics.	ja Fac: KD Clouser, A Zucker 15s
c03	Hum 720: Philosophy of Medicine. Basic concepts & assumptions of medicine: disease, normality, pain, symptoms, cause, mind-body relation, role of emotions, etc.	ja Fac: KD Clouser, A Zucker 20s
c04	Hum 740: Medicine & Law. Legal concepts & rules most applicable to medicine.	b Fac: JM Pierce 25s
c05	Hum 742: Medical-Legal Practice. Current medical-legal topics discussed in terms of conflict problems arising therefrom & possible alternative solutions.	ja Fac: JM Pierce-Hum A Frankston-Law invited speakers Law 25s
c06	Hum 750: The Doctor's Dilemma in Modern Drama. Dramatic representation of physician & his public & private responsibilities.	n.s.: Ibsen, Shaw, Chekhov, several contemporary playwrights. Fac: J Trautmann 3x; 20s
c07	Hum 752: The Body Electric. Artistic study of body; promotes establishment of an aesthetics of body to complement student's medical knowledge of it.	n.s.: Whitman, DH Lawrence, William Carlos Williams; f. Fac: J Trautmann 3x; 12-15s
c08	Hum 755: A Grammar of Literary Sexuality. Study of range of heterosexual & homosexual behavior through fiction, poetry, drama, & film. Attempt to link discussions to problems students will meet in practice.	n.s.: DH Lawrence, Joyce Carol Oates, Norman Mailer, Pauline Reage, Jean Genet, Violette Leduc, & others. Fac: J Trautmann 1x; 20s
c09	Hum 760: Infectious Disease: an American Social History. Social ecology of disease, showing all major aspects of American life as affecting & reflecting health & sickness.	n; ja; av. Fac: MS Pernick 5x; 12s

c10	Hum 762: A History of Genetics & its Uses. Influence of genetics & eugenics on each other & on development of genetic counseling.	b & ja Fac: A Zucker 1x; 15s
c11	Hum 770-A: Theories of Personality. Theories of personality & the philosophical issues which pervade them.	b & ja Fac: KD Clouser-Hum P Houts-BehavSci 15s
c12	Hum 770-B: Life in Urban America 1800-1950. Health as only 1 integrated part of the changing ecological pattern of American life.	n; ja; av. Fac: MS Pernick 1x; 5s
c13	Hum 770-G: Vox Femina. Attempt to distinguish the woman's voice--style, values, archetypes--& to relate what is learned to treatment of women as patients.	n.s.: Euripides, Aristophanes, Woolf, Mansfield, Lessing, Sexton, Plath, Wittig, others. Fac: J Trautmann-Hum J Weisz-Ob/Gyn invited nurses & physicians 1x; 15s

3220 SETON HILL COLLEGE
Greensburg, PA 15601

c01	Bio: Heredity, Evolution, & Society. Principles of human genetics, process of evolution, biological & cultural evolution of human--past, present, future.	Winchester; Volpe (1970); McAlester; Baer. Fac: A Infanger 65s
c02	Bio: Man & His Environment. Investigates increasing number of actual & potential environmental health problems.	Bernarde; Darnell; Steinhart & Steinhart; Westmoreland County Conservation District. Fac: WH Walker 60s

3230 TEMPLE UNIVERSITY
Philadelphia, PA 19122

c01	Phys 108: Physics & Society.	S; SA. Fac: G Wheeler or P Havas 4x; 15s; U
c02	SciEd 717: The Implications of Teaching Science in a Technological Society.	S; SA. Fac: G Wheeler 30s

Future Plans: possible formation of Science, Technology, & Society group; possible TV documentary as spin-off of informal sci. & society meetings.

3240 THIEL COLLEGE
Greenville, PA 16125

c01 EnvStud 31: Applied Environmental Studies. Case studies of several selected environmental problems in Western PA. Physical & social factors. Fac: T Busson, G Sorrwar

c02 EnvStud 4998.21: Introduction to Environmental Studies. Nature of environment, man's influence on it, total effect of some proposed solutions to environmental problems. Fac: PE Ode, M Spruell

c03 Rel 34: Contemporary Ethical Issues. Ethical analysis of current problems, including emphasis on socio-religious implications of biomedical & technological developments. MacQuarrie; Fletcher (1966); Lehmann; Jersild & Johnson. Fac: G Reese

c04 Soc 38: Medical Sociology. Interaction of dynamics of illness & health, dying & death, aging. Mechanic; Neugarten; Sudnow. Fac: R Bendiksen

3250 UNIVERSITY OF PENNSYLVANIA
Philadelphia, PA 19174

p01 Engineering & the History of Technology (EHT)
History & Sociology of Science (HSS)

c01 EHT: Technological Systems & Values.

c02 EHT: Energy & Society.

c03 EHT: Social Implications of Electrical Engineering.

c04 HSS 010: Science & Society. Historical & sociological views of modern sci. as cultural phenomenon. b & ja Fac: RE Kohler

c05 HSS 170: Knowledge & Social Problems. Dimensions of social organization in professional communities & the "political" condition which influences intellectual recognition. b & ja Fac: H Kuklick

c06 HSS 200: Science Since the French Revolution. Sci. regarded as body of knowledge & techniques & an activity carried on in social, institutional, & cultural environments. b & ja Fac: A Thackray

c07	HSS 201: Biology & Society. Development of biology since 17th C; its relation to broader social movements. Problems & possibilities of our biomedical future.	b & ja Fac: MB Adams
c08	HSS 203: Technology & Society. The supply of goods & services in the modern world.	b & ja Fac: JG Brainard
c09	HSS 205: Science Since World War I. Modern sci. in relation to various social & cultural settings; relation between ideologies of sci. & other social values.	b & ja Fac: RE Kohler
c10	HSS 220: Inventors, Engineers, & Entrepreneurs: European Technology. Invention, development, & innovation in a societal context.	b & ja; f. Fac: TP Hughes
c11	HSS 221: Inventors, Engineers & Entrepreneurs: Technology in America, Modern Germany & the Soviet Union. Transformation of American wilderness into man-made world & emergence of technological power. Tech. & modern industrialization in Germany & Soviet Union.	b & ja; f. Fac: TP Hughes
c12	HSS 511: Sociology of Science. Review of literature on role of social & organizational factors in development of scientific knowledge.	b & ja Fac: D Crane
c13	HSS 550: Technology in Industrial America, 1880-1950. Rise of modern technological systems.	b & ja; f. Fac: TP Hughes
c14	HSS 552: Technology in Industrial Germany & the Soviet Union. Emergence of Germany as power known for excellence in tech. & sci.; history of tech. & sci. in totalitarian state. Industrialization of Soviet Union with stress on large-scale planned tech.	b & ja; f. Fac: TP Hughes
c15	HSS 554: Science & the Industrial Revolution. Interaction of sci., tech., & society 1750-1900; British experience, emergence of professional scientist, sci.-tech. relationship.	b & ja Fac: A Thackray

c16	HSS 564: History of Technology. History of western tech. with emphasis on American developments. Close coordination with economic, social, & cultural causes & effects.	b & ja Fac: JG Brainard
c17	HSS 640: Seminar in the Sociological History of Science. Tools & techniques for handling the sociological history of sci.	b & ja Fac: A Thackray
c18	HSS 665: Seminar in the Social History of Technology. Interaction of tech., sci., & society; specific problems in history of electrical sci. & tech. in modern society.	b & ja; f. Fac: TP Hughes

Colloquia/Lecture Series

1. Regular weekly workshop covering topics in the history & sociology of sci., tech., & medicine: for faculty, researchers, graduate students, undergraduates. Arranger: R Kohler-HSS.

Future Plans: work in history of the social & behavioral scis.; work on sci. indicators.

3260 UNIVERSITY OF PITTSBURGH
Pittsburgh, PA 15260

Abbreviations: PPRP = Psychological Physics Research Program
HPS = History & Philosophy of Science

c01	Anthro 150: Technological Change & Urbanization in Africa.	G
c02	Anthro 282: The Impact of Urbanization & the Law.	Fac: Lowry G
c03	Biophys&Microbio 142: Survey of Parapsychology. Dissociated mental states & ethical responsibility; popular occultism as threat to sci.; scientific specialization as escape from reality; intellectual revolutionary process.	b & ja Fac: RA McConnell PPRP 3x; 25s; U, G, F
c04	Bus 281: Management of Technological Change.	G
c05	Econ 725: Economics of Energy.	Fac: Leary & Mutschler

c06	Eng 53: Introduction to Environmental Engineering. Causes of & solutions to environmental problems.	G	
c07	Hist 23: Ascent of Man.	Fac:	R Colodny
c08	Hist 155: Man, Technology, & Environment.	Fac:	S Hays
c09	Hist 180: Origins of the Western Scientific Tradition.	Fac: G	R Colodny
c10	Hist 181: Science & Cultures in the Modern World.	Fac: G	R Colodny
c11	HPS 197: History & Philosophy of Medicine.	Fac:	K Schaffner
c12	HPS 261: Philosophical Problems of Medicine.	Fac:	K Schaffner
c13	HPS 780: History of Science & Culture.	Fac:	various instructors
c14	IndustEng 221: Technology Systems Management. All facets of research development of engineering management, tech. organization, technological forecasting, etc.	G	
c15	Phil 128: Biomedical Ethics.	Fac:	T Schwartz-Carnegie-Mellon U
c16	Phil 881: Science & Humanism. Major aspects of 2 traditions of western culture: the humanistic & scientific models of man.	U	
c17	Phys 86: Physics & Public Policy.	Fac:	R Pratt
c18	Phys 87: Nuclear Science & Society.	Fac:	J Anderson
c19	Phys 88: Technology, Environment, & Law.	Fac:	B Goldberg
c20	RelStud 202: Man, Nature, & Society. Effort to construct view of nature & society which will contribute to sound approach to environmental & technological problems based on biblical doctrine of man.	Fac: G	Gowan
c21	Soc 3: Technology & Social Change. Changes wrought by tech. in modernizing societies & people's ability to cope with these changes through their social organization.	Fac: U	Avery

c22 Soc 145: Society & Environment. Fac: P Doreian

c23 Soc 147: Seminar in Sociology of Science. Fac: G Lewis

c24 Soc 174: Sociology of Knowledge Application. Fac: B Holzner
U
Current state of sociological understanding of processes & arrangements that relate expert knowledge to situations of decision & action in contemporary society.

c25 Soc 176: Research Organizations. Fac: B Holzner
Study of knowledge producing organizations through detailed comparisons of research & R&D organizations of different types.

c26 Soc 251: Sociology of Science. Fac: I Mitroy
G
Sci. & scientists as social-psychological phenomena. Conventional vs. radical images of sci.

c27 Soc 254: Society & Environment. Fac: P Doreian

c28 Soc 745: Sociology of Science. Fac: G Lewis
U
Social contexts of natural & social scis.

c29 Soc 751: Social Change.
U
Nature, dynamics, & functions of recent & contemporary changes in America & other places. Attention to tech. & institutional development for change.

c30 Soc 845: Seminar on Society & Environment. Fac: G Lewis
U
Relationships between man, his social arrangements, & the physical environment.

3270 UNIVERSITY OF PITTSBURGH GRADUATE SCHOOL OF PUBLIC HEALTH
Pittsburgh, PA 15261

Abbreviations: HSA = Health Services Administration

c01 HSA 252: Introduction to the Legal Aspects of Environmental Protection.
Manner in which law operates in field of environmental protection; attention to legal principles pertinent to control measures.

c02 HSA 305: Historical & Ethical Issues in Health Care.
Important historical trends & ethical issues in health care delivery.

3280 UNIVERSITY OF SCRANTON
Scranton, PA 18510

c01 Chem 170: Chemistry & the Economy.
Business practices which govern management of chemical corporations.

c02 NatSci 101: Science & the Human Environment.
Effects of technological, scientific, & industrial progress on the air, land, & water resources of the human environment.

c03 Phil 132: Medical Ethics.
Ethical aspects of various topics of concern in medicine (abortion, euthanasia, human experimentation, etc.).

c04 Theol 177: Theology & the Life Sciences.
Theological values in human life; problems posed to theology in ecology, population growth, abortion, etc.

c05 Theol 178: Religion & the Planet Earth.
Religious tradition as it relates to global consciousness.

3290 WESTMINSTER COLLEGE
New Wilmington, PA 16142

c01 Chem: Man & Natural Law.
Physical laws & ways in which scientists, artists, & society seem to understand them.
Fac: RP DeSieno
20s

c02 Chem/Engl: Images of Man.
Man & his position in nature as influenced by tech. & viewed from sci. & literature.
Fac: RP DeSieno
FD Horn
17s

3300 WIDENER COLLEGE
Chester, PA 19013

Abbreviations: Jan = January Program
Mod = Module Program

c01 Jan 811: The Making & Workings of the Environmental Protection Agency.
Pressures & legislation which led to EPA. Problems & solutions to various pollutants.
b
Fac: R DiTaranto
25s

c02 Jan 815: Man, Science, & His Society.
How scientific knowledge can contribute to solution of pressing problems of today's society.
b
Fac: I Gottlieb
25s

147

c03	Jan 834: The Origin of Man & Reflections on His Nature. Effects of current interpretations of scientific evidence upon contemporary behavioral, philosophical, & religious thought.	b Fac: T O'Tanyi, Jr. 25s
c04	S/T 904: Human Genetics & Societal Problems. Relevance of study of increasing knowledge about heredity & its effects & implications for society.	b Mod

RHODE ISLAND

3310 BROWN UNIVERSITY
Providence, RI 02912

p01 Technology & Society

c01	Eng 93A: The Automobile vs. the Environment. Scientific, economic, & political problems considered during study of alternative propulsion systems to replace internal combustion engine.	b & ja Fac: McKinzie
c02	Eng 93B: Electrical Communication. Modern communication theory applied to progress of communications tech. from telegraph to satellites & to related problems in linguistics, psychology, arts.	b & ja Fac: Kornhauser
c03	Eng 94B: Impact of Western Science & Technology on Non-Western Societies. Effects of tech. on society--its value system, how tech. stimulates changes. Includes Japan, China, India, Sub-Sahara Africa.	b & ja Fac: Glicksman
c04	Hist 182: American Civilization: Technology & Material Culture in America. Selected topics from 17th C to present.	Fac: P Malone AmerCivProg
c05	Hist 185: Perspectives in Technology & Environment. Systems approach to history of tech. emphasizing interaction between artifacts & environment.	Fac: AH Dupree
c06	Hist 186: Perspectives in Science & Society. Historical approach to history of sci. in its social setting by examining selected periods of particular relevance.	Fac: AH Dupree

c07 Hist 285: Proseminar in the History of Science & Technology. Fac: AH Dupree

c08 Hist 286: Seminar in the History of Science & Technology. Fac: AH Dupree

3320 RHODE ISLAND COLLEGE
Providence, RI 02908

Abbreviations: GS = General Studies Program

c01 GS 152-1: The Human Species: A Product of Evolution. Fac: I Lough
Biological bases of human traits & social implications of man's biological nature.

c02 GS 152-2: Science Fiction: Future Imperfect. Fac: P Pearson
Scientific & literary principles on which sci. fiction is based. Ways in which sci. fiction deals with biological, technological, environmental, & ethical problems that could possibly arise in man's future.

c03 GS 152-5: Energy, Transportation, Pollution. Fac: K Borst
Relationships that exist between pure sci. & tech. & consequences they have for society. Chemical aspects of pollution.

c04 GS 152-6: Math & Technology. Fac: R Steward
Interaction of man & tech., particularly with regard to role math plays. Humanistic & scientific perspectives in historical & contemporary setting.

c05 GS 152-7: Science & Religion. Fac: R Gehrenbeck
Which is more believable/more important part of our lives; how different are they; has conflict or cooperation between them sharpened as result of recent world developments.

c06 GS 152-8: Science & Society. Fac: B Gilbert
Selected topics on effect of modern sci. & tech. on society & vice versa.

c07 GS 153-2: Ecology Action: Is Society Willing to Pay the Price? Fac: J Sapinsley
Considers approaches economists employ in analyzing balance between costs & benefits of ecology action.

c08 GS 362-1: Population Survival. Fac: M Keeffe
Contemporary & future problems of present populations. Possible solutions for present & future population survival.

c09 GS 362-1: Heredity, Race, & Society. Fac: M Keeffe
In-depth study of major social problems.

c10 GS 362-2: Bioethics--Bridge to the Future. Fac: I Lough
Human progress & human survival, obligation to the future, control of tech., relation between order & disorder, concept of dangerous knowledge, need for interdisciplinary effort.

c11 GS 362-5: The Bomb. Fac: R Gehrenbeck
Scientific & historical factors which led to development of bomb; opportunities & responsibilities which follow in atomic age.

c12 GS 362-6: Is Science Relevant? Fac: P Glanz, R Gehrenbeck
What, if any, is carry-over from scientific discovery to socio-technological problem solving.

c13 GS 362-7: Energy--What is the Problem? Fac: A Laferriere
Energy systems discussed within context of economic & environmental concerns.

c14 GS 362-8: The World Can Remain Livable (True or False). Fac: D Greene
Interrelations among topics such as population explosion, pollution, food production, etc. & possibility of solutions, scientific & political. The necessary methodology to effect these solutions.

SOUTH CAROLINA

3330 CONVERSE COLLEGE
Spartanburg, SC 29301

c01 ComprehensiveSci 260: Science & Technology in the Community. Harte & Socolow; b & ja; f.
Fac: A Howard, P Highsmith
Phys
Investigation of uses of sci. & tech. in local community.

c02 Hum 305/505: Technological Change, Human Values, & Future Studies.
Studies from past & present brought to bear on future. Major concerns: control & dignity, work & leisure, environment & quality of life.

Brickman & Lehrer; Goldberg; Lewis; Muller (1970; 1974); n.s.: Bacon, Emerson, Ellul, Mumford.
Fac: MH Goldberg

Colloquia/Lecture Series

1. Probe, Biennial Series: theme varies. 1975: Life & Death. For students, faculty, alumnae, community. Arranger: students with faculty advisors.

3340 NEWBERRY COLLEGE
Newberry, SC 29108

c01 Bio 112: Environment & Man.
Economic, political, & moral aspects related to biological, chemical, & physical problems of ecology.

b & ja
Fac: staff

c02 Chem 104: Introduction to Environmental Science & Technology.
Water control legislation, pollution control tech., management of mineral, fuel, & water resources.

b & ja
Fac: staff

3350 UNIVERSITY OF SOUTH CAROLINA
Columbia, SC 29208

Abbreviations: GINT = Department of Government & International Studies

c01 Bio 206: Genetics & Society.
Genetic principles, emphasizing human heredity.

Fac: staff
3x; 92s

c02 Chem 201-202: Chemistry & Modern Man.
Interaction of chemistry & life of modern man. How living style of modern man has changed with chemical innovations.

Johnston, Netterville, Wood, & Jones
Fac: BM Gimarc, JR Durig, DJ Antion
4x; 35s

c03 Geog 448: Geography of the American Future.
Future in terms of social & cultural values & needs placed on environment, new tech. & environmental quality, alternative futures & policies to create them.

Fac: RL Janiskee
1x; 40s

c04	Geol 200G: Energy Resources--the Future & You. Critical examination of dwindling natural energy resources & what citizens can do.	ja Fac: staff 1x; 25s
c05	GINT 431: Science, Technology & World Politics. Impact of scientific & technological change on intnl relations. Control of nuclear weapons, peaceful uses of space, environmental problems, ntl sci. policies.	b & ja Fac: H Silverstein
c06	GINT 730. Graduate seminar on topics covered in GINT 431.	Fac: H Silverstein

Future Plans: (1) degree program on intnl aspects of environmental control under study by GINT & other departments; (2) developing program in oceanic education to cover societal involvement in problems relating to sea including legal, ocean policy, ecological, economic, etc. (within Marine Science Program); (3) possible development of more courses in area within Department of Geog.

3360 VORHEES COLLEGE
Denmark, SC 29042

Abbreviations: TC = Thirteen College Curriculum Development Program

c01	SocSci 399: Culture & Human Values. Media in American society; housing & urban change; transportation, American society, & the computer; tech. & medicine.	b & ja Fac: MB Ford-Hum F Brimelow-SocSci K Karei-SocSci T Gili-NatSci J Pula-Hist
c02	SocSci 490: Man & His Environment. Man's use & misuse of natural resources & resulting social, economic, & political consequences.	b & ja Fac: MB Ford-Hum F Brimelow-SocSci K Karei-SocSci T Gili-NatSci J Pula-Hist TC

3370 WINTHROP COLLEGE
Rock Hill, SC 29730

c01	Bio :06: Environment & Man. Natural & human environments, effects of man on his environment, environmental limits & future options.	Turk, Turk, Wittes, & Wittes (1974) Fac: staff 8x; 200s; U

SOUTH DAKOTA

3380 UNIVERSITY OF SOUTH DAKOTA AT SPRINGFIELD
Springfield, SD 57062

c01	Bio 111: Man & the Environment. Relationship of man & his tech. with the environment.	b & ja Fac: R Hempel

TENNESSEE

3390 BRYAN COLLEGE
Dayton, TN 37321

c01 Bio 401: Introduction to Biological Research.
Research project on societary problem such as environmental pollution.

3400 CARSON-NEWMAN COLLEGE
Jefferson City, TN 37760

c01 ID 230: History & Ideas of Science.
Synthesis of ideas from several scis. relating to investigaiion of central theme such as energy, food production, population, pollution. Impact of scis. on our world & world upon sci.

c02	Sci-MathDiv: The Ascent of Man. Interrelationship of sci. & humanities; influence of social & political developments on scientific discovery; effect of sci. & tech. on course of human events.	b; f. Fac: SB Vanaman

3410 CUMBERLAND COLLEGE
Lebanon, TN 37087

c01 Bio: Man & His Environment.

3420 MARYVILLE COLLEGE
Maryville, TN 37801

p01 Program in Science, Values & Society/Project on Futuristics

c01	Phil 321: Alternative Futures. Development of alternative courses of action--individual, cultural, scientific, political, etc.	Fac: D Young 1x
c02	Sci 101: Science Thought. Direction of modern sci. & tech., particularly value impact on individual & culture.	Bronowski (1956); Aronson; Clarke; DP Young; ja. Fac: B Ramger, A Shields, T Taylor-Bio N Love-Phys R Williams-Psych D Young-Futuristics 16x; 200s
c03	Sci 201: Science & Technology. Topics include technologically based growth, energy, privacy, communication.	Meadows, et.al.; Theobald & Scott; Schumacher. Fac: D Young 3x; 12s; U
c04	Sci 401: Biomedical Ethics. Considers limits for use of biomedical knowledge & question of possible changes in human species identity.	Keyes; Ramsey; Fletcher (1974); Crichton (1974); Delgado; Kubler-Ross; ja. Fac: C Steward-Phil/Rel J Savage-HeadLibrarian D Young-Futuristics 3x; 25s; U
c05	Soc 343: Sociology of the Future. To raise awareness that societies are built by choice & to offer an exercise in imagination in developing a sociological future for Maryville College.	Beitz & Washburn; Pirsig; Heilbroner (1974). Fac: D Young 8s

3430 VANDERBILT UNIVERSITY
Nashville, TN 37235

Socio-Engineering Program of the Engineering School (SE)

Abbreviations: VIPPS = Vanderbilt Institute for Public Policy Studies

c01	SE 150: Dynamics of Change: the Impact of Technology on Society. Problems pertaining to modern technological advance.	Fabun; Teich; US Congress; r. Fac: WY Smith, RS Goodrich, BD Lichter, WF Flanagan (2/semester) 6x; 35s; U
c02	SE 160: Interaction of Science & Technology with Culture. Contemporary American culture & its historical origins in sci. & tech.	Manuel; Bernstein; Brush; Oliver; Kranzberg & Pursell; S; SA; r. Fac: GE Goshen-EngMgmt A Marchant-Hist 6x; 20s; U

c03	SE 200: Principles of Technology. Characteristics of tech. as human activity. Scientific, technological, human, & other limits which establish bounds on practice of tech.	b & ja Fac: RT Nash 3x; 10s; U
c04	SE 210: Technology & Human Values. Moral problems arising out of impact of tech. on man.	Mill (1863; 1873); Bradley; Teich; Fromm; Baier & Rescher; Vonnegut (1971); r; ja. Fac: BD Lichter-SE ML Hodges-Phil 4x; 20s; U
c05	SE 245: Engineering Field Practice. Independent project--involvement in community technical problems.	b & ja Fac: WY Smith-SE DM Brown-CivEng 2x; 5s; U
c06	SE 275: Technology Forecasting & Assessment. Techniques of forecasting & methods & philosophies of assessment.	Hetman; Janstch; Martino; Bright & Schoeman; Cetron & Ralph. Fac: RS Goodrich 3x; 12s; Srs, G
c07	SE 280: Ecosystems. Mathematical treatment of systems ecology.	Odum; Watt (1967); b & ja. Fac: C Rodell 2x; 10s; U
c08	CivEng 280: Urban Development & Transportation Seminar. Historical patterns of urban growth. Transportation planning process. Socioeconomic impacts of transportation improvements. Urban systems engineering.	Owen; Winfrey. Fac: DM Brown-CivEng/SE WY Smith-SE SE 6x; 20s; U
c09	CivEng 281: Introduction to Urban Housing. Historical & legal basis for housing & urban land use in US.	Hagman Fac: WY Smith SE 3x; 20s; U
c10	URDC 375: Pollution Issues. Social, political, legal, & technical aspects of pollution control.	Murdoch; Brubaker; b & ja. Fac: FL Parker EWRE, SE 4x; 10s; G, L
c11	VIPPS/SE: Environment & Public Policy.	b & ja Fac: FL Parker, Thackston 10s; G

Colloquia/Lecture Series

1. VIPPS: focus on training & research on public policy issues.

2. SE Speaker Series: for faculty & students. Arranger: RT Nash.

3. University Seminar on Materials & Resources Policy in a Finite World: for faculty; upperclass students can register for credit. Arranger: RT Nash.

Future Plans: (1) develop interdisciplinary Master's Degree Program in SE; (2) establish center for humanities to continue lecture series on relevant current issues sponsored by NEH; (3) establish center to concentrate interdisciplinary research on issues relevant to environmental & energy issues; (4) establish interdisciplinary teams within VIPPS to offer technical assistance to groups working on public policy issues (e.g., Law Enforcement Administration Agency, Tennessee Hospital Association).

3440 VANDERBILT UNIVERSITY SCHOOL OF LAW
Nashville, TN 37240

c01 Law: Medical Profession & the Law. Selected topics of current concern to medical profession, such as genetic counseling & control, informed consent, health care delivery system, definitions of life & death.
b & ja
Fac: HL Levinson-Law
J Davies-Med

TEXAS

3450 ABILENE CHRISTIAN COLLEGE
Abilene, TX 79601

c01 Sci: Chemistry & Society.

3460 EAST TEXAS BAPTIST COLLEGE
Marshall, TX 75670

c01 Soc 334: Social Problems. Problems of society which are outgrowth of technological change.
Fac: J Palmer
3x; 35s; U

c02 Soc 438: Community. Development of community structure & function, focusing primarily on American communities & process of urbanization with emphasis on influence of tech. on the process.
Poplin; Warren; ja.
Fac: J Palmer
1x; 6s; U

3470 INCARNATE WORD COLLEGE
San Antonio, TX 78209

c01 Bio 4341: Ecology, Environment, & Man.
Interactions of man in his manufactured environment.

b; r.
Fac: DD McLain
4x; 40s; U

c02 Chem 4301-4302: Science & Civilization.
Problems facing modern society.

b & ja
Fac: RD Rataiczak
20s

Future Plans: Peace Studies Program planned.

3480 MIDWESTERN UNIVERSITY
Wichita Falls, TX 76308

c01 Hist/Honors: Science & Society.
Interconnections between sci. & social needs throughout course of western history. Areas of economics, war, health, religion, philosophy.

Truitt & Solomons; Koestler; Tierney, Kegan, Williams, et.al.; Marsak; Bronowski (1956).
Fac: BD Powers

3490 NORTH TEXAS STATE UNIVERSITY
Denton, TX 76203

c01 Econ 530: Graduate Seminar in the Economics of Technological Innovation.
Critical role of technological innovation as determinant of economic development in a mature economy.

b & ja
Fac: MJ Davidson
10x; 12-15s; G

3500 SAM HOUSTON STATE UNIVERSITY
Huntsville, TX 77340

c01 Bio 366: Human Genetics & Societal Problems.

Fac: AA Dewees
15s; U

3510 SOUTHERN METHODIST UNIVERSITY
Dallas, TX 75275

c01 EE 1302: Systems, Man & Society.
Concepts of tech. & man; decision making; models.

ECCP (1968; 1973); Forrestor; Battelle monographs.

c02 Phil 5304/Theol XS-63: Seminar in Bioethics.
Examination of moral issues that have been accentuated by recent developments in biological scis. & medical tech.

b & ja; f.
Fac: R Zaner, F Carney
U, G

c03 Seminar in Philosophy of Medicine.
Examination of concepts of health & disease, death, the natural & normal, & of explanation & description in medicine.
ja
Fac: R Zaner, D Hausman

Future Plans: major graduate degree in philosophy of medicine; undergraduate offerings in medical ethics & philosophy of medicine.

3520 SOUTHERN METHODIST UNIVERSITY SCHOOL OF LAW
Dallas, TX 75275

c01 Law: Science, Technology, & Law.
Study of development by courts & legislators of rules to meet impact of scientific & technological innovations; how diverse societies are organized to meet new problems through law.
Fac: HJ Taubenfeld

Colloquia/Lecture Series

1. Annual Symposium on Air Law Problems: for mixed audience. Arranger: Journal of Air Law & Commerce.

3530 SOUTHWEST TEXAS STATE UNIVERSITY
San Marcos, TX 78666

c01 Bio 3305: History & Philosophy of Science.
Gardner; b & ja.
Fac: RT Gary, SW Edwards

c02 Geog 3313: Natural Resource Use & Planning.
Dasmann; Campbell & Wade.
Fac: DL Hartsock

c03 Geog 3330: Environmental Management.
Meek & Straayer; Dorfman & Dorfman.
Fac: DL Hartsock

c04 PolSci 3380: Science & Politics.
Blissett; Lakoff; b & ja.
Fac: GM Weinberger

3540 TEXAS A&M UNIVERSITY
College Station, TX 77843

Texas Transportation Institute (TTI)

c01 AgEd 440: Principles of Technological Change.
Processes by which professional change agents influence introduction, adoption, & diffusion of technological change.

c02 AgEd 640: Methods of Technological Change. Dynamics of cultural change as theoretical framework for process of planned technological change, methods of planning & implementing change, its effects & how it can be predicted.

c03 Bio 330: Life Science. Concepts of life sci. with emphasis on social implications.

c04 Bioeng 301: Biomedical & Social Systems. Biomedical engineering through its history; its impact on society.

c05 CivEng 664: Water Resources Development. Conservation & utilization of water resources with emphasis on legal, social, & economic phases of watershed planning & multi-purpose projects.

c06 Eng 301: Engineering & Society. Attempt to describe tech. qualitatively & define its limits & role in problem areas involving tech., social & political scis.

c07 Engl 334: Science Fiction Present & Past. Literary evaluation & social significance.

c08 Geog 401: Political Geography. Ecological perspective on political relationships; environment as issue & control in ntl & intnl affairs.

c09 Geog 619: Man's Impact on His Environment. Ecoethics, environmental behavior, & decision making.

c10 NuclEng 330: Technology & Society. Risks & benefits of main techs. of our society, regulatory agencies, function of codes & standards, political implications & interfaces of techs. Tech. assessment as decision process.

c11 Phil 201: Contemporary Moral Issues. Application of ethical positions to contemporary social problems--technological problems.

Girvetz; ja; f.
5x

c12 Phil 205: Technology & Human Values. Future patterns of moral response required by current moral situation & potential scientific progress.

Fac: LA Hickman
150s

c13 Soc 615: Science & the City.
Impact of sci. & tech. on urban organization & disorganization; role of information tech. & theory for improving urban policy & urban environment.

Future Plans: (1) Committee on Technology Assessment: Institutional coordination of public tech. assessment efforts; (2) courses in medical ethics by Phil & ColMed.

3550 TEXAS TECH UNIVERSITY
Lubbock, TX 79409

c01 CivEng 4335: Relationship of Technology to Society.

3560 UNIVERSITY OF HOUSTON AT CLEAR LAKE CITY
Houston, TX 77059

p01 Studies of the Future (SF)

c01 Econ 6332: Resources in the Future.
SF

c02 Env 4331: Ecology & Public Policy.
SF

c03 Env 5931: Environmental Impact Statements.
SF

c04 Govt 5532: Public Policy & the Study of the Future.
SF

c05 Hist 4931: Black Holes & Space Probes.
Fac: Kondo
SF

c06 Lit 4139: Science Fiction in Literature & Film.
SF

c07 Lit 4536: Images of the Future in Science Fiction.
SF

c08 Soc 4136: Introduction to Future Studies.
Meadows, et al.; Kahn & Briggs; Segerberg; Berry.
Fac: J Fowles
SF

c09 Soc 4931: Moral Issues in the Future of Science.
Fac: C Dede
SF

c10 Soc 5931: Man's Future in Space.
SF

c11 Soc 6334: Technology & Society in the Future.
Bronwell; D Freeman; Rosenberg.
Fac: J Fowles
SF

c12	Soc 6631: Program Seminar in Futures Studies.	SF

Colloquia/Lecture Series

1. Bimonthly public meetings offered through Houston Chapter of the World Future Society.

3570 UNIVERSITY OF HOUSTON
Houston, TX 77004

c01	Hist 338A/B: Science & Technology in American Life. Spread of British industrial revolution; selected chronological topics in history of tech. during 20th C.	Kranzberg & Pursell Fac: LS Swenson
c02	Hist 487A/B: History of Science. Selected chronological topics in 20th C history of sci., from relativity to Apollo moon missions.	Bronowski (1974); Mason; DJ Price; Kargon; Pirsig. Fac: LS Swenson
c03	IDH 445T/Hist 440T: Science & the Rise of Technology Since 1800. Deals with main developments in sci. & tech., particularly interaction between the 2. Growth of "history of sci. & tech." as academic discipline.	Ashton; Cardwell (1957); Goodman (1972); Williams & Kerry; Chambers; OU unit books. Fac: LS Swenson OU
c04	OU: Science & Belief: From Copernicus to Darwin. Intellectual rather than technological implications of sci. Changing impact of scientific ideas upon western culture in general discussed with particular reference to religious belief systems.	Gillispie (1970); Goodman (1973); Hooykaas; Russell; OU unit books. Fac: LS Swenson

Colloquia/Lecture Series

1. The Archimedeans: regional Gulf Coast group of professional people interested in history & philosophy of sci., tech., & medicine. Hold monthly meetings of about 20 people (mostly academics). Arranger: LS Swenson-U of Houston, W Van Helden-Rice U, K Vaux-Texas Medical Center.

3580 UNIVERSITY OF TEXAS AT EL PASO
El Paso, TX 79968

c01	Phys: Contemporary Physics. Study of atom & physics of atomic dimensions followed by discussion of specific topics such as energy problem.	Fac: CS Cook 2x; 10s

c02 Phys: Special Topics--Energy. Fac: CS Cook
2x; 10s; G

3590 UNIVERSITY OF TEXAS HEALTH SCIENCES CENTER AT HOUSTON
Houston, TX 77025

Abbreviations: IRHD = Institute of Religion & Human Development. IRHD offers courses in cooperation with Baylor College of Medicine, U of Texas Medical School, Texas Women's University, & other professional schools in the health disciplines.

c01 BiomedSci 21.03.2: Philosophy & Biomedical Sciences. Fac: Kennedy
G
Relationship between sci. & philosophy. Problems of knowledge, logic, complexities of being, & ethics. Pertinent scientific & philosophic literature from Aristotle to Cioran.

c02 IRHD 21.04.3: Survey Course in Medical Ethics. Fac: K Vaux
Sources of medical ethics in Hippocratic, Nurenberg, & religious traditions. Range of problems studied. Task of establishing sanctity of human life & values of health professional ethics undertaken.

c03 IRHD 21.05.3: Death & Life. Fac: K Vaux
Meaning of death, care of dying patient, ethical problems related to terminal illness.

c04 PubHealth 118: Public Health & the Legislative Process. Fac: Cardin
In-field examination of state legislative process as influence of public health & environmental control policies & practices.

c05 PubHealth 119: Legal Aspects of Public Health. Fac: Cardin
Federal, state, & local health legislation. Economic implications of public health action.

c06 PubHealth 161: Power Structure & Community Health. Fac: Justice
How plans & ideas are converted into public programs, policy, & action--health related issues.

c07 PubHealth 611: Introduction to International Health. — Fac: faculty in IntnlHealth
Role of WHO, Pan American Health Organization, ntl & private agencies in administration & provision of health care worldwide. Regulations governing health relations among countries.

c08 PubHealth 612: Case Studies of Development of Health Services in Selected Countries. — Fac: faculty in IntnlHealth
Health systems & services in selected countries: their stage of development, constraints related to socio-political, socio-economic, & socio-cultural aspects of public health.

3600 WHARTON COUNTY JUNIOR COLLEGE
Wharton, TX 77488

c01 DentHyg 201: Advanced Professional Adjustment, Ethics, & Jurisprudence.
Laws governing practice; economics & ethics of the profession.

UTAH

3610 UNIVERSITY OF UTAH
Salt Lake City, UT 84112

c01 Chem: Chemistry, Technology, & Society. — Fac: C Walling; 4x
Parallel development of chemical sci. & tech. & interrelations between academic sci., tech., & government & their contributions to current problems of society & their solution.

c02 Eng 112: Technology. — de Nevers; Fac: staff

c03 FuelsEng 141: Energy & Man. — ja; Fac: DM Bodily; 12s
Tech. of energy production, conversion, & utilization. Role of energy in society & environmental impact of energy consumption.

c04 MiningEng 499: Mining Seminar. — Fac: staff; 75s
Current topics related to mining, society, energy, & the environment.

c05 Phys 100: Science & Society. — b & ja
Fac: staff & invited speakers
Group of separate sections, each concerned with different theme of technological-social significance. Past courses have dealt with energy, arms limitation, futurism, communication, women in sci.

c06 Phys 390: Independent Interdisciplinary Studies. — b & ja
Sci. & society themes in depth.

Colloquia/Lecture Series

1. Weekly departmental colloquia/seminar: for faculty and graduate students. Arranger: K Kuchar.
2. Frontiers of Science: open to public. Arranger: P Gibbs.
3. The High School Science Lecture Series: for high school students. Arranger: P Gibbs.

VERMONT

3620 GODDARD COLLEGE
Plainfield, VT 05667

p01 Goddard College Institute for Social Ecology (ISE)

c01 ISE: Ecology & Society. — Fac: M Bookchin, D Chordorkoff
Relationship between environmental change & social change. Practical alternatives to present social systems in terms of community & tech.

c02 ISE: Energy. — Fac: S Nielsen
Survey of sources & uses of energy--past, present, & future. Tech. of energy conversion. Future alternatives, historical review.

3630 GREEN MOUNTAIN COLLEGE
Poultney, VT 05764

c01 Science & Society. — Fac: L Boothby
20s
Impact of scientific research on contemporary social problems & the environment, including moral implications of particular kinds of research.

c02 Crucial Questions.
Critical dilemmas & irreversible choices presented by scientific & technological advances: nuclear strength, genocide, abortion, euthanasia, etc.
Fac: A Barsalow
20s

3640 JOHNSON STATE COLLEGE
Johnson, VT 05656

c01 EnvStud 100.
Complex environmental problems from philosophical, aesthetic, economic, political, & biological viewpoints.
Fac: J Smith

c02 EnvStud 303: Environmental Policy I.
Why economic system fails to give sufficient weight to environmental consequences; policies proposed & implemented for state & federal action to deal with problem.
Fac: D Tobey

c03 EnvStud 304: Environmental Policy II (Legislation).
State & federal legislation dealing with environmental problems. Emphasis on legislation which VT has pioneered in last few years.
Fac: K Cheney

c04 EnvStud 330: The Development of the Environmental Ethic.
Philosophical attitude various cultures at different time periods have had toward their environments.
Fac: J Smith

VIRGINIA

3650 BLUE RIDGE COMMUNITY COLLEGE
Weyers Cave, VA 24486

c01 Phil 271-272-273: Thanatology: Perspectives on Dying & Death.
Man's attempt to understand meaning of death & his ways of handling its personal & social implications. Psychological, sociological, cultural, religious perspectives.
b & ja
Fac: DA McKnight
ContinuingEd
3x; 30s

c02 SocSci 180: Problems of Man in the Modern World.
Contemporary social, political, & economic problems related to industrialization, urbanization; role of government; ntl & intnl tensions.
b & ja
Fac: staff
ContinuingEd, PoliceSci
3x; 28s

[redacted]

3660 CHRISTOPHER NEWPORT COLLEGE
Newport News, VA 23606

p01 The Center for Science & Ethics in Public Policy (CSEPP)
p02 Science & Society Unit--Department of Physics

c01 Phys 395-1: Physics & Modern Art. — ja; Fac: JC Webb, GR Webb; lx
Influence of models of physics in works of 5 artists: Pollack, Vasarely, Picasso, Kandinsky, Mondrian.

c02 Phys 395-2: Ethics in Medicine & Politics. — HC; ja; Vaux. Fac: JC Webb, GR Webb; lx
Basic concepts in ethics as applied to examples in medicine & politics; emphasis on areas where advances in tech. have been important.

c03 Phys 395-3: The Impact of Nuclear Energy. — Fac: SG Al-Salam; lx

Colloquia/Lecture Series

1. Workshops on Ethics & Politics in Light of the New Technologies: for general public. Funded by NEH. Arranger: GR Webb, JC Webb (CSEPP).

2. Workshops on Ethics & Journalism: for print, electronic, & special interest journalists from Tidewater, VA. Funded by Virginia Foundation. Arranger: JC Webb, GR Webb (CSEPP).

3670 MARSHALL-WYTHE SCHOOL OF LAW, COLLEGE OF WILLIAM & MARY
Williamsburg, VA 23185

c01 Law: Environmental Law & Science. — Fac: SC Whitney
Survey of relationship between law & sci. in solution of environmental problems.

Future Plans: possible publication of semi-annual environmental law journal.

3680 FERRUM COLLEGE
Ferrum, VA 24088

Abbreviations: HS = Senior Division in Human Services

c01 HS 302: Today's Society: Problems & Prospects.
Problem solving & analysis: population, nuclear war, standard of living, etc.

c02 HS 304: Man & Technology.
Historical & philosophical problems related to man's development of tech. & struggle with environment. Social, political, moral, & philosophical basis for man living with tech.

c03 HS 305: Man & the Future.
Futuristic phenomena, associated philosophical problems, methods for predicting the future needs of man.

3690 UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE
Charlottesville, VA 22901

Abbreviations: HD = Humanities Division, School of Engineering & Applied Science

c01 Astron: Scientific Controversy & Astronomy. — Fac: PA Ianna
UFO's, magic number series, mystical approaches cloaked in scientific terms involving astronomy & astronomical observations.

c02 Econ: Technology & the Economy. — Fac: W Breit
Theoretical & historical analysis of impact of technological change on modern economic systems with emphasis on its effect on individual welfare.

c03 EDCI 551-552 (Ed): Environmental Education. — Fac: J Kelly
Examination of major historical & contemporary issues underlying curriculum development in environmental education. Ethical & human value implications of sci. & tech.

c04 EnvSci 161: Land Use & Environmental Impact. — Fac: WE Reed
U
Issues in ntl & regional land use; examination of policies for effecting regional development, resource use, & environmental change.

c05 EnvSci 360: Resource Analysis. — Fac: E Gardiner
U
Concepts of decision making & policy implications for management of water, air, open space, & urban systems.

c06 EnvSci 405: Applied Studies in Environmental Sciences. — Fac: JS Fisher & staff
U
Applied problems & case studies, including techniques used in their solution, encountered in general field of environmental sci. Environmental impact study.

c07 EnvSci 460: The Continental Shelf. — Fac: WA Wallace
U
Economic & political aspects of nearshore waters & the Continental Shelf: resources, ownership, control, application of Intnl Law of Sea.

c08	EnvSci 714-715: Normative & Descriptive Models for Environmental Assessment. Survey of linear models & their use in environmental assessment. Analysis of use of these models in policy evaluation & decision making.	Fac: SS Skjei G
c09	EnvSci 890-891: Seminar in Resource Analysis. Interdisciplinary focus on research in resource utilization, policy development, & policy evaluation. Systems nature of problems emphasized.	Fac: staff G
c10	EnvSci 895-896: Advanced Topics in Resource Analysis. Specialized research into specific resource allocation problems. Emphasis on integrative analysis of the physical, social, & economic nature of these problems.	Fac: staff G
c11	HD: Thomas Jefferson's Interest in Science & Technology.	Fac: J Vaughan
c12	HD: Man & Machines: Visions of Tyranny & Freedom in Modern Literature.	Fac: I Soudek
c13	HD: Technology, Aggression, & Peace.	Fac: G Hereford
c14	HD: Utopias & the Technological Society.	Fac: J Longley
c15	HD: Reflections of Science & Technology in the Mass Media.	Fac: A Gianniny
c16	HD: Technology Assessment.	Fac: G Hereford
c17	IR 833: Science & Philosophy in International Relations Theory. Basic questions & problems in study of intnl relations, varied approaches to them, theoretical frames of research.	Fac: RS Wood Govt&ForeignAffrs
c18	Phys 583: Scientific Aspects of Technological Policy. Semi-quantitative scientific reasoning applied to policy decisions in technological areas such as arms control, transportation systems, power generation, & technological decision making.	Fac: JV Noble
c19	PlngDiv (Arch): Alternative Futures. Consideration of major "driving forces" on our society, including tech. Alternatives to big tech. & dangers of "secondary" effects.	Fac: R Collins

c20 PlngDiv (Arch): Environmental Planning. Fac: R Collins
Consideration of role of tech. in promoting or retarding growth.

c21 Rel 357: Religion & the Transformation of Nature through Science. Fac: C Clarke
Religious dimensions of sci. as creative human activity.

c22 Rel 358: Religion, Science & Social Change. Fac: C Clarke
Role of sci. & tech. as dominant forces shaping human life.

3700 UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE
Charlottesville, VA 22901

p01 Program in Human Biology & Society (HBS)

c01 HBS: Medicine & Society Conferences. Fac: J Fletcher, T Hunter & others
Series of monthly conferences dealing with problems relating to values, ethical judgments, benefits & costs to individuals & society. M

c02 HBS: Society, Ethics, & Human Biology. Fac: staff from various schools
Series of non-credit semi-monthly seminars coordinated with Medicine & Society Conferences in which topics discussed at conferences & other subjects are considered in depth. G

Colloquia/Lecture Series

1. Medicine & Society Conferences: for medical & nursing students, house staff, medical faculty, public. Arranger: TH Hunter, HBS.

3710 UNIVERSITY OF VIRGINIA, VIRGINIA INSTITUTE OF MARINE SCIENCE
Gloucester Point, VA 23062

c01 MarineSci 849: Marine Resources in Public Affairs. Fac: WJ Hargis, Jr. G
Methods by which public policy regarding marine natural resources is formed & executed.

c02 MarineSci: Legal Aspects of the Marine Environment. Fac: NB Theberge G

Future Plans: course for municipal officers & other responsible civic leaders on water & air pollution problems, conservation practices of natural resources, pesticides & herbicides, population problems & possible control methods.

3720 VIRGINIA MILITARY INSTITUTE
Lexington, VA 24450

c01 Phys 308: Science & Society. Cultural, technological, & social impact of sci. on society; emphasis on energy situation & implications for future.
Schroeer; Priest; Marion (1974).
Fac: AA Adams
2x; 30s

3730 VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY
Blacksburg, VA 24061

c01 Hist 3701: History of Science. From antiquity to Middle Ages, concentrating on social influences.
Fac: R Schallenberg, H LeGrand

c02 Hist 3702: History of Science. From Renaissance to circa 1750.
Fac: R Schallenberg, H LeGrand

c03 Hist 3703: History of Science. From 1800 to present, concentrating on biology & institutions of sci.
Fac: R Schallenberg, H LeGrand

c04 Hist 3711: History of Technology. Antiquity to 1800, concentrating on relationship of history of tech. & more conventional forms of history.
Fac: R Schallenberg

c05 Hist 3712: History of Technology. From 1800 to present.
Fac: R Schallenberg

c06 Hist 4700: History of Science & Technology. Problems course.
Fac: staff
Srs

c07 Hist 5191-5192-5193: History of Physical Science.
Fac: staff
G

c08 MechEng 4500: Complexity of Socio-Technological Problems. Complexity & interconnectedness of problems involving tech. & society.
Fac: Feury

c09 MiningEng 3040: History of Mining. History & development of mining tech. & law from prehistoric to modern times. Importance of mining industry to society & its role in world development.

c10 Phil 1300: Search for Self. Impact of tech. on personal values (among other topics).
Mesthene; Skinner (1971).
Fac: CE Cardwell, JC Pitt

c11 Phil 2600: Revolution in Science. Change of scientific theories; concentrates on Copernican Revolution.
Fac: JC Pitt

Future Plans: Program in the History & Philosophy of Science & Technology--interdepartmental program involving courses in history, philosophy, engineering, & science departments. Designed to provide undergraduate minor.

3740 WASHINGTON & LEE UNIVERSITY
Lexington, VA 24450

p01 Society & the Professions: Studies in Applied Ethics

c01 ID 101: Interdepartmental Seminar: the Human Population Problem.
Population trends, causes, effects, & possible solutions.
b & ja
Fac: staff from Bio, Econ, Phil, Pol, Rel, Soc
4x; 16s

c02 ID 341: Bio-Medical Ethics.
Issues arising out of impact of modern biomedical research & practice.
b & ja
Fac: L Hodges-Rel
staff from Bio
2x; 11s; Srs

WASHINGTON

3750 UNIVERSITY OF WASHINGTON
Seattle, WA 98195

p01 Institute for Environmental Studies (ENVS)
p02 Program in Social Management of Technology (SMT)

Abbreviations:
HSS = Humanistic Social Studies, College of Engineering
IMS = Institute for Marine Studies
PBPL = Public Policy, Graduate School of Public Affairs
METE = Metallurgical Engineering
WS = Women's Studies

c01 ENVS 361: Environmental Values & Perceptions.
Way cultural & individual values affect our perception of & relation to environment. Role of myths & images in value formation, problem of conflicting values within societies & their impingement on environmental problems, & possible methods of resolution.
Saarinen; Sims & Baumann; Heimstra & McFarling.
Fac: G Sharp

c02 ENVS 431/452: Introduction to Environmental Impact Assessment.
Role, background, methods, & practices of environmental impact assessment in improving environmental quality.
Dickert & Domeny
Fac: G Sharp

c03 ENVS 498: Special Topics in Environmental Studies: Environmental Law.
Major legal developments in number of areas of current concern: air & water quality, energy, pollution.
Fac: staff

c04	SMT/HSS 301: Creating the Future. Examines concept of alternative individual & societal futures & opportunities for creating them. Scenarios for future explored; methods of forecasting investigated.	Toffler (1972); Theobald; Beitz & Washburn; Fabun (1970). Fac: B Osborn, J Douthwaite
c05	SMT 310: Social Constraints on Engineering Design. Examines cases of engineering designs & identifies ways in which social goals affect engineering design decisions. Explores social values & public policy issues that generate design criteria.	Fac: P Bereano-SMT J Evans-CivEng
c06	SMT 401: Introduction to the Social Management of Technology. Surveys problems facing different kinds of professionals in attacking issues related to contemporary tech.	Heilbroner (1974); b & ja. Fac: B Osborn
c07	SMT 403: Satisfying Human Needs in a Technological Society. Tech., via the value system of a particular culture, is related to the satisfaction of basic human needs.	b & ja Fac: B Osborn
c08	SMT 410: Technology Assessment--Concept & Methods. Tech. assessment suggested as the systematic study of various impacts on society that may occur when a tech. is introduced, extended, or modified. Prepares student to perform tech. assessment.	Teich; Hetman. Fac: R Watson
c09	SMT 461: Energy Technology & Public Policy. Analysis of bases of ntl & state energy policy developments, with main focus on institutional, environmental, & economic implications of energy development.	Fac: B Hyman
c10	SMT 498: Special Topics: Technology, Society, & Public Policy. Special topics dealing with tech., society, & public policy. Topics include tech. assessment, energy policy, role of tech. in social policy formation, & institutional means of regulating tech.	
c11	SMT 498A: Development & Intermediate Technology. Explores concept of "intermediate" or "appropriate" techs. How concept relates to ideas about development & growth; whether has different implications for developed nations & 3rd world. Public policy aspects.	Schumacher; n.s.: Murray Bookchin, Theodore Roszak, JK Galbraith, UN Environmental Conference, Club of Rome; ja. Fac: P Bereano Srs, G

c12	SMT 499: Special Research Projects: Technology, Society, & Public Policy. Independent individual or team undergraduate research projects dealing with tech., society, & public policy.	U
c13	SMT 520A/MechEng 498B: Seminar: the Promise of Solar Energy. Economic, political, technological, & social considerations which will determine extent to which future development of solar energy will fill future needs. Examines profound changes in society which could accompany large-scale adoption of solar energy techs.	Fac: B Hyman-SMT J Bodoia-MechEng
c14	SMT/METE 520A: The Coming Materials Crisis. Interdiscipiinary approach to examination of materials system & the economic, political, technological, environmental, & social considerations which will affect patterns of materials supply & utilization in US over next several decades.	Fac: B Hyman, Stoebe
c15	SMT 520B: Health Futures. Explores health as life process of becoming rather than ill-defined state of being. Possible topics include health care vs. illness care, the medicalization of politics, holistic health centers.	Fac: B Osborn
c16	SMT 520C: Ethical Dilemmas in Technological Society. Ethical dilemmas that daily confront the citizen & the practicing professional, & that have become more compelling in a technological age.	Fac: E Wenk, Jr., R Rushmer
c17	SMT 520D: Seminar: Economic Regulation of Technology. Origins & foundations of regulation; regulatory methodology & mentality; criteria for distinguishing between appropriate & inappropriate regulation; introduction of new tech.; technological damage in regulation: pollution, radiation, etc.	Fac: R Zerbe
c18	SMT 520D: Seminar on Disarmament & Arms Control. Technical background to modern weapons, particularly nuclear & thermonuclear. Motivation for disarmament. Do armaments lead to conflict or conflicts to an arms race? Relation of disarmament & peaceful resolution of conflicts.	Fac: R Peierls Srs, G

c19	SMT 530-531: Technology Assessment Methods & Analysis I, II. Analysis of practice & methods of tech. assessment & preparation of specific assessment. How a systematic attempt to anticipate social, economic, political, & environmental impacts of tech. on society can be undertaken.	Hetman Fac: R Watson
c20	SMT/CivEng/PBPL 540-541-542: Social Management of Technology I, II, III. Analyses of interaction of tech. & society through general principles & case studies of contemporary issues & public policy.	Deutsch; DK Price; Seidman; Teich; Wenk; NAE; NAS-NRC (1969b).
c21	SMT 560: Urban Technology & Urban Policy. Study of major trends linking tech. & urban life in growth of American cities. Major tech. policy questions pertaining to: fire protection, police protection, computer information systems, solid waste management, communications, transportation, related public services. Tech. policy.	Fac: EO Mork
c22	SMT 565: Seminar in Atmospheric Science Policy Problems. Decision making & policy determination in major ntl atmospheric programs. Students develop & evaluate alternate policies.	Fac: RG Fleagle
c23	SMT 599: Current Topics in the Social Mangement of Technology. Readings, lectures, & discussion of topics of current interest in field of tech. policy assessment.	
c24	SMT 599B: Economic Methodology for Technology Assessment. Economic criteria for efficient resource allocation in theory & practice. Applies theory to policy problems with technological components.	Fac: R Zerbe
c25	SMT 599B/Soc 581A: Technology & Women. Compares technological rationality with feminist modes of thought. Impact of industrialization & division of labor in which home becomes center of consumption & waged labor force is center of "production" for exchange. Techs. which particularly impact women. How tech. can be used to achieve family, home, & work force aims or needs of women in future.	Fac: P Bereano-SMT C Bose-Soc/WS

c26	SMT 599C: Topics in Energy Conservation. Examines patterns of energy use in US & opportunities for reducing wasteful practices & for developing more efficient techniques of energy utilization. Integrated approach to technological, social, political, & environmental aspects of subject.	Fac: B Hyman
c27	CivEng 543: Marine Technology Affairs I. Case studies in marine legislation, fishery conventions, coastal pollution, environmental observations, planning for intnl exploration of sea, etc. to identify components in the marine tech. enterprise, dynamics of interrelationships, policy planning & institutional conflicts in setting goals, priorities, & program strategies.	Wenk; Stratton Commission. Fac: E Wenk, Jr.
c28	CivEng 544: Marine Technology Affairs II. Class-generated group research on a contemporary marine issue in Washington State leading to specific policy proposals.	Fac: E Wenk, Jr.
c29	Hist 215: The History of the Atomic Bomb. History of atomic bomb from beginning of nuclear physics to security hearing of J Robert Oppenheimer.	b & ja; f. Fac: TL Hankins 5x; 150-200s; U
c30	Hist 311: Science in Civilization: Antiquity to 1600. From pre-classical antiquity to end of Middle Ages, stressing growth of scientific ideas, cultural context in which they take shape, & their relationship to other movements of thought in history of civilization.	Mason; Gillespie (1960); b. Fac: TL Hankins 10x; 8s; U
c31	Hist 312: Science in Civilization: Science in Modern Society. Growth of modern sci. since Renaissance, emphasizing scientific revolution of 17th C, development of methodology, & emergence of new fields of interest & new modes of thought.	Mason; Gillespie (1960); b. Fac: TL Hankins 12x; 8s; U
c32	Hist 411: Origins of Modern Science; the Physical Sciences. History of physical scis. seen through intensive study of key periods in their development. Emphasis on nature of scientific revolutions & role of individual scientists.	Fac: TL Hankins 3x; 12s; U

c33	Hist 412: Science & the Enlightenment. Role of sci. in relation to intellectual, social, economic, & religious forces in 18th C, & growth of intnl community in sci. during same period.	b & ja Fac: TL Hankins 7x; 12; U
c34	IMS 501-502: Marine Studies: Scope & Content I, II. Survey of relations between man & ocean, nature & causes of conflicts, organizations involved & techniques employed in planning, management, & formulation of alternatives.	b & ja Fac: staff & invited speakers 1x; 15s; G
c35	IMS 506: International Law of the Sea. Examination of way nation-states regulate activities on & under ocean.	
c36	IMS 508: Economic Aspects of Marine Policy. Development of pertinent economic concepts & their application to selected topics in marine policy decision making.	b & ja Fac: JA Crutchfield, RL Stokes 1x; 13s; G
c37	IMS 509: Marine Coastal Zone: Policy & Management. Multiple uses of continental shelf, coastal waters, & adjacent land; conflicts arising from competition for space & resources; organizational problems associated with overlapping jurisdiction & spheres of interest; development of alternatives for resolution of conflicts.	b & ja; Gagliano; Mitchell; Baldwin & Baldwin; Clark (2). Fac: MJ Hershman, RL Stokes 1x; 8s; G
c38	IMS 510: Law of the Coastal Zone. Uses of coastal zone, who the decision makers are, how their decisions are made, how they are implemented.	
c39	PBPL 507: International Organizations & Ocean Management. Survey of manner in which intnl organizations attempt to manage & regulate uses of ocean.	b & ja Fac: EL Miles IMS 1x; 6s; G
c40	PBPL 583-584-585: Seminar in Science & Public Policy. Issues & problems relating to interaction of sci. & scientists with public policy making process.	b & ja Fac: D Wolfle 5x; 12s; G
c41	PBPL 586: International Science & Technology Policy. Relationships between R&D policy, capabilities, & ntl technological strategies for advanced industrial & less-developed countries. Intnl implications of particular techs.	b & ja Fac: EL Miles 1x; 9s; G

c42 PBPL 593-594-595: Policy Development & Administration: Natural Resources.
Natural resources policy development & administration; processes of natural resources policy formulation & analysis, role of various sectors in influencing policy development & administration.
b & ja
Fac: JA Crutchfield, ME Marts, RH Pealy
8x; 15s; G

Colloquia/Lecture Series

1. Graduate-faculty seminar sponsored by Institute for Environmental Studies. Topics vary each quarter. Topics have included: "Energy & Growth in the Pacific Northwest" & "Population & Food Supply."

3760 WHITWORTH COLLEGE
Spokane, WA 99251

c01 Core 350.
Search for quality of life in a culture dominated by sci. & tech. Study of social, economic, religious, educational, & personal norms that help &/or hinder an individual in defining & achieving quality.
p; ja.
Fac: DL Hicks

WEST VIRGINIA

3770 ALDERSON-BROADDUS COLLEGE
Philippi, WV 26416

c01 Hum 39: Theological Perspectives on Value-Dependent Issues in Contemporary Medicine.
Topics include abortion, artificial insemination, care for elderly, quality care for socially & economically disadvantaged.
Fac: Fowler

3780 DAVIS & ELKINS COLLEGE
Elkins, WV 26241

Abbreviations: IGS = Integrated Sequence

c01 IGS 300: The Future.
Futuristics, with emphasis on limits to expansion & ethical questions facing a new society.
Meadows, et al.; Hardin; Heilbronner (1974); ja; f.
Fac: team-taught

3790 SOUTHERN WEST VIRGINIA COMMUNITY COLLEGE
Williamson, WV 25661

c01 Sci 120: Environmental Studies. Biology, chemistry, & sociology of current ecological problems, particularly local.
ja; f.
Fac: staff & guest speakers
3x; 25s

3800 WEST VIRGINIA UNIVERSITY
Morgantown, WV 26506

c01 CivEng: Industrial Archaeology. Techniques employed by industrial archaeologist. Technological, social, & economic significance of selected basic industries.
Fac: E Kemp

c02 CivEng: History of 19th Century Technology. Significance & interrelationship of ideas, processes, & applications of scientific principles which led to astonishing growth of tech. & industry in 19th C.
Fac: E Kemp

c03 GenlEng 111: The Impact of Technology on Society. Social relevance of tech. & engineering in today's culture. Attitudes of scientists, engineers, & others compared.
Susskind
Fac: R Haynes
8x; 140s

c04 Hum 150-151: Humanities in a Technological Society. Rise, progress, & ideology of modern tech. & investigation of some aspect of its pervasive influence on lives of men.
b & ja
Fac: J Stasny, S Gribble, E Kemp
Engl, LibrarySci, CivEng
2x; 50s

c05 IndustArts 400 (Tech): Technology: Its History & Development. Major technical periods in man's history & interrelationships of technological developments to social/cultural milieu.
Kranzberg & Pursell
Fac: P Devore
5x; 15s

c06 IndustArts 404 (Tech): Readings in Technology & Culture. Fundamental, historical, & contemporary ideas of nature of tech. as an area of man's created knowledge.
b & ja
Fac: P Devore
5x; 15s

c07 MultidiscStud 91-92: Introduction to Technology & Society. Introduction to tech. (its nature & goals) & society (its nature & goals) in Victorian era.
Fac: J Stasny, S Gribble, E Kemp
Engl, LibrarySci, CivEng

3810 WEST VIRGINIA UNIVERSITY LAW CENTER
Morgantown, WV 26506

c01 Law: Moral, Ethical, & Legal Problems in Medicine.
Topics include abortion, euthanasia, behavior control, & experimentation with human subjects.
ja
Fac: JT Philipps

WISCONSIN

3820 ALVERNO COLLEGE
Milwaukee, WI 53215

Abbreviations: Comp = Competency Based Program

c01 BioSci 016: Perspectives in Biology.
Special topics in social biology.
ja; n.
Fac: LC Truchan

c02 BioSci 020: Biological Concepts.
Sci./tech./values.
Fac: staff
Comp

c03 BioSci 121: Microbiology.
Sci./tech./values. Sci./global dimensions.
Fac: LC Truchan
Comp

c04 Ed: Global Dimensions of Education.
Intensive 3-day workshop on sci./tech./values.
ja
Fac: LC Truchan & staff

c05 EnvStud 061: Environmental Awareness.
Awareness of 5 components of metropolitan environment (natural, technological, sociological, psychological, economic) & interrelatedness of one to another.
ja; n.
Fac: LC Truchan
3x; 30s

3830 LAKELAND COLLEGE
Sheboygan, WI 52081

c01 GenlStud 141: Future Studies.
Physical limitations imposed on mankind & society by availability of natural resources & tech.
Meadows, et al.; Toffler (1970).
Fac: C Rolli
Math, Phys
2x; 20s

3840 MOUNT MARY COLLEGE
Milwaukee, WI 53222

c01 Bio/Engl/Geog 490: Future Studies: the Multi-Disciplinary Honors Seminar.
Utopian & dystopian literature, forecasting, resources, population, life styles, values.
Meadows, et al.; More; Skinner (1948); Toffler (1972); b & ja.
Fac: D Rauch-Geog
F Sherburne-Engl
J Cook-Engl
P Moehring-Bio

3850 NORTHLAND COLLEGE
Ashland, WI 54806

c01	BusAd/Econ 210: *Economics of the Environment.* Theories & measurement of economic costs of air, water, urban, & industrial pollution.	b Fac: F Tan EnvStud 4x; 30s; U
c02	Chem 300: *Technology Assessment.* Assessment of probable economic, social, political, technical, & environmental consequences of new techs.	b & ja Fac: G Wulfsberg EnvStud 3x; 10s; U
c03	Hist 240: *Man, Nature & History.* Man's perception of nature & impact on the landscape over course of western history.	b Fac: S Lang EnvStud 4x; 20s; U
c04	LiberalStud 23: *Environment & Man.* Selected studies from scientific aspects of man's relationship to his environment.	b Fac: R Verch EnvStud 6x; 50s; U

3860 RIPON COLLEGE
Ripon, WI 54971

c01	Art: *Art & Technology.* Study of techniques of organization & relationship to art-institution.	Fac: EM Breithaupt
c02	Bio 101: *Topics in Biology.* Historical & biological topics which relate man to his environment.	b & ja Fac: staff 120s; U
c03	Bio 213: *Environmental Conservation.* Ecological, political, legal, economic, & social aspects of environmental conservation.	Fac: W Brooks 20s

Future Plans: discussions being held concerning initiation of regional studies program involving social & natural scis.

3870 UNIVERSITY OF WISCONSIN-GREEN BAY
Green Bay, WI 54302

Abbreviations:
HCC = Humanism & Cultural Change
LES = Liberal Education Seminars
MP = Modernization Processes
GC = Graduate Course

c01 GC 512: Foundations of Knowledge in the Cultural & Natural Sciences. G
Problems related to nature & validation of knowledge in cultural & natural scis.

c02 GC 545: Economic Analysis of Environmental Issues. G
Analysis of an economic system's impact on natural environment & inhabitants; underlying causes of pollution from economic perspective.

c03 Hist 448-208: The Development of Modern Science in Western Society.
Interrelationships between modern sci. & western society & ways in which each has helped to shape & form other.

c04 Hist 448-405: History of Technological Change.
Impact of major inventions on patterns of life in modern society; ecological problems.

c05 HCC 101: Introduction to Humanistic Studies I.
Way human values are expressed in man's scientific, philosophic, artistic, & technological endeavors.

c06 HCC 313: Man, Machines & the Environment.
Environmental effects of man's attempts to exploit resources & to alter his surroundings throughout time.

c07 LES 101-102: Freshmen Modules on the Theme: Crises of Belief & Ecology.
Man's values & their relations to contemporary ecological problems.

c08 LES 538-401: Senior Seminar.
Selected problems in natural, social, technological, & cultural environment.

c09 MC 662-400: Environmental Law.
Synthesis of court decisions on federal, state, & local levels; examination of legislation statutes & administrative codes which touch upon aspects of physical environment.

c10 MC 662-415: Development, Technology, & Environmental Quality.
Interrelationships between people, tech., & environment examined in relation to social, political, & economic development & environmental quality.

c11 Phil 208: Philosophy & Scientism.
Origins of scientism in behavioral & natural scis. Establishment of philosophical critique of social & political representations of scientism in 20th C.

3880 UNIVERSITY OF WISCONSIN-LA CROSSE
La Crosse, WI 54601

c01 Bio 201: Human Biology.
Implications of tech. & sci. with respect to the systems discussed.

c02 Chem 100: Contemporary Chemistry.
Survey of chemistry; the tech. & impact of chemistry on society.

3890 UNIVERSITY OF WISCONSIN-MADISON
Madison, WI 53706

p01 Undergraduate Program on Man, Technology & Society (MTS)

Abbreviations: ILS = Integrated Liberal Studies

c01 MTS: Technology, Man & Culture.
Development of tech. & changing relationship to sci.; images of tech. & impact on man in modern literature; artistic dimensions of tech. & potential for new art forms in modern technological innovations.

Cardwell (1972); Benthall; AO Lewis; Stadler.
Fac: R Kennedy, T Reynolds, G Schoff
GenlEng
U

c02 MTS: Interpretations of Technology in Literature.
Impact of tech. upon literary artist & his creations from mid-19th C to present.

Eiseley (1957); Huxley (1968); Remarque; Hemingway; Beckett; Vonnegut (1974); Orwell (1972); f; poems & essays.
Fac: G Schoff
GenlEng, ILS
U

c03 MTS: History of Technology.
Survey of developments from primitive techniques to 19th C power techs. with consideration of interactions between sci. & tech., critical role of power development, sources of technological innovation, comparisons of western & Chinese achievements, key technological areas of social impact.

Derry & Williams; Mumford (1934).
Fac: T Reynolds
GenlEng, HistScis
U

c04 MTS: Technology, Values, & Changing Life Styles.
Differing interpretations of sci. & tech.; tech. as major instrument in generating value change; current value questions in environmental movement.

Pirsig; Slater (1975); Heilbroner (1974); Barbour (1973); Ellul (1967); Fritsch.
Fac: E Daub
GenlEng, Phil
U

c05	MTS: Science, Technology & Public Policy in Developing Countries. Interaction between politics & different levels of tech. in developing countries; case studies of technological developments & political decisions.	Montgomery; Goulet; Achebe (1969a,b); NAS-NRC (1969b); b & ja; f. Fac: E Mikol, D Dresang GenlEng, PolSci U
c06	MTS: Science & Technology Journalism. Techniques of reporting & interpreting sci. & tech. to general public.	Krieghbaum; Reddick; West; Moore (1972); ja. Fac: E Daub, H Howe GenlEng, Journ U, G
c07	MTS: Technical Considerations in Public Issues. Focus on contemporary public issues in which technical understanding & technical choices are of vital significance.	b & ja GenlEng, MechEng U, G

3900 UNIVERSITY OF WISCONSIN-MADISON, CENTER FOR HEALTH SCIENCES
Madison, WI 53706

p01 Program in Medical Ethics, Department of the History of Medicine (HM)

c01	HM 558: Ethical Problems Raised by Biomedical Technology. Survey & analysis of ethical issues created by biomedical tech.	b & ja Fac: NC Fost, JA Robertson, D Wilker 60s; Ucl
c02	HM 730: Ethical Issues in Medicine. Systematic approach to dealing with ethical conflicts.	b & ja Fac: NC Fost 25s; M, G
c03	HM 940: Law & Medicine. Legal problems in medicine, including those raised by technological advancement.	b & ja Fac: JA Robertson L, M, G

3910 UNIVERSITY OF WISCONSIN LAW SCHOOL
Madison, WI 53706

c01	528-940-0: Law & Contemporary Problems (Human Experimentation). Contemporary research operations in human experimentation area, consequences of such experimentation, types of subjects used, social variables leading to particular research, consequences of allowing or disallowing such research.	Katz Fac: LV Kaplan tx
c02	528-911-1: Psychiatry & Law Seminar. Elaboration of psychoanalytic theory & relationship that theory may be shown to have with jurisprudence in general.	Katz, Goldstein, & Dershowitz Fac: LV Kaplan

c03	Law: Law, Technology, & Society. Content varies. Spring 1974: product liability as tech. assessment mechanism. Spring 1975: energy, with focus on selected problems in utilization of coal as source.	b & ja Fac: E Berlin
c04	Law: Protection of Intellectual Property. Law of patents, copyrights, & trade secrets. Impact of new techs. on these laws & vice versa.	Goldstein Fac: J Kidwell

3920 UNIVERSITY OF WISCONSIN-MILWAUKEE
Milwaukee, WI 53201

p01 Cultural & Technological Studies (CTS)

c01	Hist/CTS 161: Men & Machines in American Technology. Biographical study of inventors, industrialists, & engineers with emphasis on their value systems & corresponding relationships to tech.	b & ja Fac: RH Merritt, AF Shaikh 2x; 100s; U
c02	CompLit/Zool/CTS 175: Frankenstein Revisited: Bioethics & the Future of Man. Cultural, ethical, & aesthetic implications of biological tech.	b & ja Fac: S Skelton, N Press 1x; 150s; U
c03	Phil/CTS 237: Technology, Values & Society. Discussion of controversies over whether modern tech. is progressive or regressive force in human life. Impact of tech. on individual & institutional values.	b Fac: B Gendron, E Ratledge 2x; 60s; U
c04	UrbAffrs/CTS 240: Technology & Urban, Industrial Development. Impact of socioeconomic factors on technological change & effects of new products & production techniques upon urban industrial development.	b Fac: J Blair, M Besel 1x; 60s; U
c05	Anthro/CTS 246: Cultural Systems, Energy, & Technology. Impingement of tech. on social organization & relationship between cultural systems, energy, & tech.	b Fac: S Auerbach, IC Romer 2x; 40s; U
c06	Anthro 247: Topics in Technology & Cultural Institutions. Relationship of cultural institutions & values to knowledge & skills by which man has designed & used tools, machines, & techniques.	b & ja Fac: D Kurtz, S Auerbach 2x; 60s; U

c07	Anthro 352: Perspectives in the Anthropology of Technology: Conflict, Aggression & Warfare in Cross-Culture Perspectives. Arguments for & against biologically determined aggression tendencies in humans & arguments for aggression & warfare being result of socio-cultural factors. Cause/effect role of tech. on human warfare; links between military tech. & cultural survival.	b & ja Fac: S Auerbach 1x; 40s; U
c08	Arch 201: Introduction to Architectural Studies: User-Oriented Health Care Facilities. Conceptual & informational inputs to improve designer's ability to deal with problem solving in holistic, responsive, & responsible approach.	b & ja Fac: U Cohen, A Haynes 1x; 40s; U
c09	Art 135: Human Factors & Aesthetics in Design & Technology. Investigative study of cultural & aesthetic values & their related applications to tech. & human factors in design. Problem: environmental playground equipment.	b & ja Fac: M Lacktman, E Ratledge 1x; 40s; U
c10	Comm 313: Human Communications & Technology. Actual & potential role of tech. in facilitating satisfying communication relationships & other human goals.	b & ja Fac: C Rossiter 1x; 40s; U
c11	CompLit 393: Technology in Utopian Literature & Science Fiction. Incidence of tech. in past & present western cultures, & in speculative cultural systems, with special reference to utopian literature & science fiction.	b Fac: RA Swanson 30s; Srs
c12	Engl 220; Literature & Contemporary Experience: Technology & the American Dream. Critical study of technological man as hero & anti-hero in post-WWII fiction, poetry, & essay.	b & ja Fac: K Woodward 3x; 25s; U
c13	Engl 221: Literature & Media: the Artist in a Technological World. Study of tech. as primary catalyst in development of post-WWII literature & art in US & France: the typewriter novel, computer poetry & film, the ready-made concept, etc.	b & ja; f. Fac: K Woodward 1x; 25s; U

c14	German 350: Mass Culture, Technology, & the Manipulation of Consciousness. Tech. & development of 20th C mass culture in art, literature, & media, utilizing theories of Frankfurt School.	b & ja Fac: A Huyssen 1x; 30s; U
c15	Hist 203-204: Social History of American Technology since 1600. American social & technological development.	b; r. Fac: N Miller, RH Merritt 3x; 100s; U
c16	Hist 374: Perspectives in American Urban Technology. Impact of urbanization, immigration, & industrialization on development of community values & individual identity; emphasis on aesthetics of city development.	b Fac: RH Merritt 1x; 45s; U
c17	Hist 375: The History of Transportation in the United States Since 1790. Transportation as instrument of economic & social change: tech., the public interest, & private property.	b & ja Fac: N Miller 1x; 50s; U
c18	Phil 238: Topics in Technology & Cultural Institutions. Basic philosophical & moral issues which underlie attempted solutions to social problems such as overpopulation, war, etc.	b; r. Fac: B Gendron 2x; 60s; U
c19	Phil 338: Perspectives in the Philosophy of Technology. Topics on role of tech. in human life: persons & machines, interaction of sci. & tech., idea of progress, decentralization.	b; r. Fac: B Gendron, C Hedman 5x; 45s; U
c20	Soc 327: The Social Organization of Technology: a Comparative Perspective. Way in which number of unrelated human societies, randomly distributed in time & space, view, evaluate, organize, & incorporate tech. into their cultural tradition.	b & ja Fac: S Greenfield 1x; 45s; U
c21	UrbAffrs 340: Indicators of Death & Life in Great American Cities. Non-economic factors that determine quality of life.	b & ja Fac: P Pflaum 1x; 40s; U
c22	UrbAffrs 350: The New Utopias: the Mystique of Systems Design & Social Change. Systems theories techniques used to improve rationality of operation of city governments & services--inherent strengths & limitations of these techniques.	b & ja Fac: M Barndt 1x; 40s; U

c23 UrbAffrs 440: The City in the World of the Future.
Links concerns of tech. & social sci. in planning for city of future.
b; r.
Fac: G Gappert, P Pflaum
lx; 40s; U

Colloquia/Lecture Series

1. Monthly Faculty Seminars in Technology & Human Values (CTS): for faculty, guests, students. Arranger: RH Merritt, DE Drake.

2. Faculty Workshops (CTS): for faculty, guests, students. Arranger: RH Merritt, DE Drake.

3. CTS Lecture/Discussion Series on Technology & Culture: for public. Arranger: RH Merritt, DE Drake.

Future Plans: (1) summer institutes in tech. & culture; (2) continued development of new CTS courses each year.

3930 MEDICAL COLLEGE OF WISCONSIN
Milwaukee, WI 53233

c01 PreventiveMed: Sophomore Course in Health Care Delivery.
Factors affecting perception of health needs & utilization of community resources; current status of health care delivery system; law, ethics, & religion in medicine.
Fac: staff

c02 Psychiatry: Sophomore Course in Psychiatry.
Psycho-social aspects of human sexuality, death & dying, etc.
Fac: staff

Colloquia/Lecture Series

1. Milwaukee County Medical Complex Grand Rounds: presentations on ethics of experimentation, transplants, etc. interspersed among traditional "clinical" topics. For medical students, house staff, faculty. Arranger: Departments of Medicine, Surgery, & Pediatrics.

3940 UNIVERSITY OF WISCONSIN-STEVENS POINT
Stevens Point, WI 54481

Abbreviations: RM = Program in Resource Management

c01 Bio 100: Biology & Man.
Man's present & future relationship to his environment.
b & ja
Fac: Hall
EnvStud

c02	Bio 318: Human Genetics & Eugenics. Principles of heredity & variation with emphasis on social & ethical implications.	b & ja Fac: staff EnvStud
c03	Econ 204: Environmental Economics. Economics & environmental quality.	b & ja Fac: D Christie EnvStud, RM
c04	NatRes 370/570: Resource Management for Environmental Quality. Natural, social, & economic influences on environmental quality.	b & ja Fac: I Korth EnvStud, RM
c05	PeaceStud 370: Futures. Social & scientific trends relating to future of mankind.	b & ja Fac: W Kirby, R Artigiani Ed, Hist
c06	PeaceStud 389: Biological Factors & Effects on War & Aggression. Cooperation & conflict in animals, including man, ecological effects of warfare tech.	b & ja Staff: G Becker Bio
c07	Phil 380: Environmental Ethics. Religious, philosophical, & scientific roots of human attitudes toward nature & environment; alternatives.	b & ja Fac: B Callicott EnvStud, RM
c08	Phys 333: Physical Approach to Environmental Science. Physical principles of nature; impact of tech.; energy alternatives.	b & ja Fac: A Blocher EnvStud
c09	PolSci 301: Politics & the Environment. Interactions of sci. & tech. with society & bearing upon public policy.	b & ja Fac: R Christofferson EnvStud
c10	Sci&Ethics 300/500. Variable content: genetic manipulation, abuse of legal drugs, etc.	Fac: staff

Colloquia/Lecture Series

1. Annual Symposium on Science & Ethics: full day's activities including 5-7 distinguished guest lecturers & panel discussions. For students, faculty, professionals, community. Arranger: JP Zawadsky-Phil, J Harris-Bio, G Geeseman-Bio.

3950 UNIVERSITY OF WISCONSIN-STOUT
Menomonie, WI 54751

Abbreviations: ITE = Industrial Teacher Education

c01 ITE: Impact of Industry & Technology. — b & ja; f.
Interaction between individuals & tech. Tech. assessment. — Fac: LH Smalley

c02 Transdisc: Future Studies. — b; n.
Future projections into alternatives that may be possible. Role of tech. in future. — Fac: LH Smalley

Colloquia/Lecture Series

1. New Dimensions in Technology: for undergraduates, graduate students, faculty. Arranger: LH Smalley.

Future Plans: expansion of futures courses.

3960 UNIVERSITY OF WISCONSIN-WHITEWATER
Whitewater, WI 53190

c01 ID: Interdisciplinary Course on Environmental Studies. — Meadows, et al.
Emphasis on solution of local environmental problems. — Fac: A Dakan-Geog
J Kozlowicz-PolSci
R Stonecipher-Phys
G Smith-Bio

3970 VITERBO COLLEGE
La Crosse, WI 54601

c01 Bio 334: Human Genetics. — Winchester; Volpe (1971); ja.
Principles of genetics related to man. Possibilities & implications of future genetic interventions. — Fac: A Pollpeter
25s

c02 Chem 101: Chemistry & Society. — Fac: H Eisbund & staff
Impact of chemistry as it relates to social dimensions of economics, politics, philosophy, aesthetics, & sociological problems. History of major conceptual schemes of chemistry. — 40s

c03 EnvSci 117-118: Environmental Science. — Turk, Turk, Wittes, & Wittes (1974); ja.
Integration of factual scientific material with societal implications & values clarification. — Fac: A Pollpeter & 3 others
25s

PUERTO RICO

3980 UNIVERSITY OF PUERTO RICO SCHOOL OF LAW
Rio Piedras, PR 00931

c01 Law: Legal Medicine.
Fac: staff from Law & Med
Survey of present state of medical sci. & scientific method of medicine. Analysis of trauma, emphasizing legal consequences. Preparation of medical aspects of case. Government regulation of medicine. Medical aid programs, including malpractice & civil rights problems in this area.

c02 Law: Research in Natural Resources.
Fac: staff from Law & SocSci
Study of problems of natural resources; existing administration & legal structure & conservation & use planning of these resources; adequacy of these mechanisms & recent legal tendencies in this field.

B. COURSE LITERATURE LIST

Abramson, Norman, and Kuo, Franklin F., eds. Computer-Communication Networks. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Achebe, Chinuce. Arrow of God. Garden City, NY: Anchor Books, 1969a.

_______. Things Fall Apart. Greenwich, CT: Fawcett Publications, 1969b.

Adrian, Charles. Governing Urban America. New York: McGraw-Hill, 1955.

Aeschylus. Oresteia.

Allen, Francis R. Socio-Cultural Dynamics; an introduction to social change. New York: Macmillan, 1971.

Allen, Francis R., et al. Technology and Social Change. New York: Appleton-Century-Crofts, 1957.

Allen, Fred Lewis. The Big Change: America Transforms Itself, 1900-1950. New York: Harper & Row, 1952.

Allen, Jonathan, ed. March 4: Scientists, Students and Society. MIT conference. Cambridge, MA: MIT Press, 1970.

American Chemical Society. Committee on Chemistry and Public Affairs. Subcommittee on Environmental Improvement. Cleaning Our Environment: the chemical basis for action. Washington, DC: American Chemical Society, 1969.

Anderson, Edgar. Plants, Man, and Life. Boston: Little, Brown & Co., 1952.

Anderson, Frederick R. NEPA and the Courts: A Legal Analysis of the National Environmental Policy Act. Baltimore: Johns Hopkins University Press, 1973.

Anderson, Walt, ed. Politics and Environment. Pacific Palisades, CA: Goodyear Publishing Co., 1970.

Annals of the American Academy of Political and Social Science. "The Energy Crisis: Reality or Myth?" November 1973.

Annas, George J. The Rights of Hospital Patients. New York: Avon Books, 1975.

Appleman, Philip. Darwin. New York: WW Norton & Co., 1970.

Apter, Michael J. The Computer Simulation of Behavior. London: Hutchinson & Co., 1970.

Aquinas, Thomas. The Division and Methods of the Sciences. Toronto: Pontifical Institute of Mediaeval Studies, 1953.

Ardrey, Robert. The Social Contract. New York: Dell Publishing Co., 1971.

Aristophanes. The Frogs.

Aristotle. The Poetics.

Arnold, Matthew. "Literature and Science" (1882). In Representative Essays of Matthew Arnold. EK Brown, ed. Toronto: Macmillan Co. of Canada, 1936.

Aronson, Elliot. The Social Animal. San Francisco: WH Freeman & Co., 1972.

Art, Robert J., and Waltz, Kenneth N., eds. The Use of Force. Boston: Little, Brown & Co., 1971.

Ashton, Thomas Southcliffe. The Industrial Revolution, 1760-1830. New York: Oxford University Press, 1964.

Asimov, Isaac. A Short History of Chemistry. Garden City, NY: Anchor Books, 1965.

ASUCLA. Cancer Control and the Legislative Process.

Augenstein, Leroy George. Come, Let Us Play God. New York: Harper & Row, 1969.

Avers, Charlotte J. The Biology of Sex. New York: John Wiley & Sons, 1974.

Bacon, Francis. The New Organon, and Related Writings. Edited by Fulton H. Anderson. New York: Liberal Arts Press, 1960.

Baer, Adela. Heredity and Society; readings in social genetics. New York: Macmillan, 1973.

Baier, Kurt, and Rescher, Nicholas, eds. Values and the Future: the impact of technological change on American values. New York: Free Press, 1969.

Baily, William Robert. Diagnostic Microbiology: a textbook for the isolation and identification of pathogenic microorganisms. St. Louis: CV Mosby Co., 1966.

Baker, Adolph. Modern Physics and Antiphysics. Reading, MA: Addison-Wesley Publishing Co., 1970.

Baker, Herbert G. Plants and Civilization. Belmont, CA: Wadsworth Publishing Co., 1970.

Baldwin, Pamela L., and Baldwin, Malcolm F. Onshore Planning for Offshore Oil: Lessons from Scotland. New edition. New York: Universe Books, 1975.

Ball, George W., ed. Global Companies: the political economy of world business. Englewood Cliffs, NJ: Prentice-Hall, 1975.

Barber, Bernard. Science and the Social Order. Glencoe, IL: The Free Press, 1952.

Barber, Bernard, and Hirsch, Walter, eds. The Sociology of Science. New York: Free Press, 1962.

Barbour, Ian G. Issues in Science and Religion. Englewood Cliffs, NJ: Prentice-Hall, 1966.

______. Science and Secularity; the ethics of technology. New York: Harper & Row, 1970.

______. Western Man and Environmental Ethics. Reading, MA: Addison-Wesley Publishing Co., 1973.

Barbour, Ian G., ed. Earth Might be Fair; reflections on ethics, religion and ecology. Englewood Cliffs, NJ: Prentice-Hall, 1972.

Barfield, Owen. Saving the Appearances; a Study in Idolatry. London: Faber & Faber, 1957.

Barkley, Paul W., and Seckler, David W. Economic Growth and Environmental Decay. New York: Harcourt Brace Jovanovich, 1972.

Barnet, Richard J., and Muller, Ronald E. Global Reach: the power of the multinational corporations. New York: Simon & Schuster, 1974.

Barnett, Lincoln K. The Universe and Dr. Einstein. New York: W. Sloane Associates, 1948.

Baxter, William F. People or Penguins; the case for optimal pollution. New York: Columbia University Press, 1974.

Becker, Carl L. The Heavenly City of the 18th Century Philosophers. New Haven: Yale University Press, 1932.

Beckett, Samuel. Waiting for Godot. New York: Grove Press, 1954.

Befu, Harumi. Japan: an Anthropological Introduction. San Francisco: Chandler Publishing Co., 1971.

Behnke, John A., and Bok, Sissela, eds. The Dilemmas of Euthanasia. Garden City, NY: Doubleday & Co., 1975.

Beitz, Charles R., and Herman, Theodore, eds. Peace and War. San Francisco: WH Freeman & Co., 1973.

Beitz, Charles, and Washburn, Michael. Creating the Future. New York: Bantam Books, 1974.

Bell, Daniel. The Coming of Post-Industrial Society: A Venture in Social Forecasting. New York: Basic Books, 1973.

Bellamy, Edward. Looking Backward, 2000-1887. New York: Modern Library, 1917.

Ben-David, Joseph. The Scientist's Role in Society; a comparative study. Englewood Cliffs, NJ: Prentice-Hall, 1971.

Bennis, Warren G. Changing Organizations; Essays on the Development and Evolution of Human Organization. New York: McGraw-Hill, 1966.

Bennis, Warren G., and Slater, Philip E. The Temporary Society. New York: Harper & Row, 1968.

Benthall, Jonathan. Science & Technology in Art Today. New York: Praeger Publishers, 1972.

Benviniste, Guy. The Politics of Expertise. Berkeley: Glendessary Press, 1973.

Beres, Louis Rene, and Targ, Harry R. Reordering the Planet: Constructing Alternative World Futures. Boston: Allyn & Bacon, 1974.

Bernal, J.D. Science and Industry in the 19th Century. London: Routledge & Kegan Paul, 1953.

________. Science in History. Volume 2: The Scientific and Industrial Revolution; Volume 3: The Natural Sciences in Our Time. Cambridge, MA: MIT Press, 1971.

Bernard, H. Russell, and Pelto, Pertti. Technology and Social Change. New York: Macmillan, 1972.

Bernarde, Melvin A. Our Precarious Habitat. New York: WW Norton & Co., 1970.

Bernstein, Jeremy. Einstein. Edited by Frank Kermode. New York: Viking Press, 1973.

Berry, Adrian. Next Ten Thousand Years. New York: Saturday Review Press, 1974.

Blackstone, William T., ed. Philosophy and the Environmental Crisis. Athens, GA: University of Georgia Press, 1974.

Blau, Sheridan D., and Rodenbeck, John von B. The House We Live In; An Environment Reader. New York: Macmillan, 1971.

Blissett, Marlan. Politics in Science. Boston: Little, Brown & Co., 1972.

Bloch, Marc. Feudal Society. Vol. I, Part II; Vol. IV. Chicago: University of Chicago Press, 1961.

Bohm, David. Causality and Chance in Modern Physics. London: Routledge & Kegan Paul, 1957.

Bollens, John C., and Schmandt, Henry J. The Metropolis: Its People, Politics and Economic Life. 3rd edition. New York: Harper & Row, 1975.

Boorstin, Daniel J. The Americans: the democratic experience. Vol. 3. New York: Random House, 1973.

Boros, Ladislaus. The Mystery of Death. Bainbridge, NY: Herder & Herder, 1965.

Boston Women's Health Collective. Our Bodies, Ourselves. New York: Simon & Schuster, 1973.

Boughey, Arthur S. Ecology of Populations. 2nd edition. New York: Macmillan, 1973.

Boulding, Kenneth E. The Meaning of the Twentieth Century. New York: Harper & Row, 1964.

Bowler, T.D. Introduction to General Systems Theory.

Bradley, Francis H. Ethical Studies. Oxford: Clarendon Press, 1927.

Brady, Frank, and Price, Martin, eds. English Prose and Poetry: Sixteen Sixty to Eighteen Hundred. New York: Harper, Row & Winston, 1961.

Brecht, Bertolt. Galileo. New York: Grove Press, 1966.

Brickman, William, and Lehrer, Stanley. Automation, Education and Human Values. New York: Thomas Y. Crowell, 1966.

Briggs, Asa. Victorian Cities. London: Odhams Books, 1963.

Bright, James, ed. Technological Forecasting for Industry and Government; methods and applications. Englewood Cliffs, NJ: Prentice-Hall, 1968.

Bright, James, and Schoeman, Milton, eds. A Guide to Practical Technological Forecasting. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Brittain, J. Selected Papers in Electrical Engineering History. Forthcoming.

Brodie, Bernard. Strategy in the Missile Age. Princeton: Princeton University Press, 1959.

Brodie, Bernard, and Brodie, Fawn M. From Crossbow to H-Bomb. Bloomington: Indiana University Press, 1973.

Bronowski, Jacob. Ascent of Man. Boston: Little, Brown & Co., 1974.

________. The Common Sense of Science. Cambridge, MA: Harvard University Press, 1961.

________. Science and Human Values. New York: Julian Messner, 1956.

Bronwell, Arthur B., ed. Science and Technology in the World of the Future. New York: John Wiley & Sons, 1970.

Brooks, Alexander D. Cases and Materials on Law, Psychiatry, and the Rights of the Mentally Disabled. Boston: Little, Brown & Co., 1974.

Brooks, Harvey. "What's Happening to the US Lead in Technology?" Harvard Business Review. Reprint #72301.

Brown, Lester R. In the Human Interest: a strategy to stabilize world population. New York: WW Norton & Co., 1974.

________. The Interdependence of Nations. New York: Foreign Policy Association, 1972a.

________. World Without Borders. New York: Random House, 1972b.

Brown, Martin. The Social Responsibility of the Scientist. New York: The Free Press, 1971.

Brown, Seyom. New Forces in World Politics. Washington, DC: The Brookings Institution, 1974.

Brown, Theodore L. Energy and the Environment. Columbus, Ohio: Charles E. Merrill Publishing Co., 1971.

Brush. History of Mathematics and Logic.

Bryant, James Conant. Modern Science and Modern Man. New York: Columbia University Press, 1952.

Brzezinski, Zbigniew. Between Two Ages: America's Role in the Technotronic Era. New York: Viking Press, 1970.

________. The Fragile Blossom: Crisis and Change in Japan. New York: Harper & Row, 1972.

Bube, Richard H. The Encounter Between Christianity and Science. Grand Rapids, MI: William B. Eerdmans Publishing Co., 1967.

Buber, Martin. I and Thou. Edinburgh: T. & T. Clark, 1937.

Bulletin of the Atomic Scientists. All in Our Time: The Reminiscences of 12 Nuclear Pioneers.

Burchell, Robert W., Listokin, David, in collaboration with Brail, Richard E., et al. The Environmental Impact Handbook. New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1975.

Burgess, Anthony. *The Clockwork Orange*. London: Heinemann, 1962.

_______. *The Wanting Seed*. New York: Ballantine Books, 1972.

Burke, John G. *The New Technology and Human Values*. Belmont, CA: Wadsworth Publishing Co., 1966.

Burling, Robbins. *Hill Farms and Padi Fields: Life in Mainland Southeast Asia*. Englewood Cliffs, NJ: Prentice-Hall, 1965.

Burns, James MacGregor, and Peltason, J.W. *Government by the People*. Englewood Cliffs, NJ: Prentice-Hall, 1972.

Butterfield, Herbert. *Origins of Modern Science: 1300-1800*. Revised. New York: Macmillan, 1957.

Cadden, J. *Science and Literature*.

Caldwell, Lynton K. *In Defense of Earth: international protection of the biosphere*. Bloomington: Indiana University Press, 1972.

Caldwell, Lynton K., and DeVille, William B. *Science, Technology and Public Policy: a syllabus for advanced study*. Bloomington: Department of Government, Indiana University, 1968.

Callahan, Daniel J. *The Tyranny of Survival*. New York: Macmillan, 1973.

Campbell, Norman Robert. *What is Science?* New York: Dover Publications, 1952.

Campbell, Rex R., and Wade, Jerry L. *Society and Environment: The Coming Collision*. Boston: Allyn & Bacon, 1972.

Cardwell, Donald S.L. *The Organisation of Science in England; a retrospect*. Melbourne: Heinemann, 1957.

_______. *Turning Points in Western Technology*. New York: Science History Publishers, 1972.

Cargo, David N., and Mallory, Bob F. *Man and His Geologic Environment*. Reading, MA: Addison-Wesley Publishing Co., 1974.

Cartwright, Frederick F., in collaboration with Biddiss, Michael D. *Diseases and History*. New York: Thomas Y. Crowell, 1972.

Castaneda, Carlos. *Journey to Ixtlan: the lessons of Don Juan*. New York: Simon & Schuster, 1972.

Cetron, Marvin J., and Ralph, C. *Industrial Applications of Technological Forecasting; its utilization in R&D management*. New York: Wiley-Interscience, 1971.

Chai, Ch'u, and Chai, Winberg. *The Changing Society of China*. New York: New American Library, 1969.

Chambers, Jonathan David. *The Workshop of the World; British Economic History from 1820 to 1880*. New York: Oxford University Press, 1961.

Chambliss, William J., ed. *Problems of Industrial Society*. Reading, MA: Addison-Wesley Publishing Co., 1973.

Chandler, Alfred Dupont, ed. *Giant Enterprise: Ford, General Motors and the automobile industry; sources and readings*. New York: Harcourt Brace World, 1964.

Chase, Allan. *The Biological Imperatives: health, politics, and human survival*. New York: Holt, Rinehart & Winston, 1971.

Chen, Kan; Lagler, Karl F.; Gray; Mathes; Pollock; et.al. *Growth Policy: Population, Environment and Beyond*. Ann Arbor: University of Michigan Press, 1974.

Childe, Vere Gordon. *Man Makes Himself*. London: Watts & Co., 1941.

Churchman, C. West. *The Design of Inquiring Systems: Basic Concepts of Systems and Organization*. New York: Basic Books, 1971.

________. *The Systems Approach*. New York: Dell Publishing Co., 1968.

Cipolla, Carlo M. *Guns, Sails and Empires*. New York: Pantheon Books, 1965.

Clagett, Marshall. *Greek Science in Antiquity*. New York: Abelard-Schumann, 1955.

Clark, Kenneth. *Civilisation: A personal view*. New York: Harper & Row, 1970.

Clark (2). *Ecological Straits on Coastal Development*.

Clarke, Arthur C. *Profiles of the Future; an inquiry into the limits of the possible*. Revised edition. New York: Harper & Row, 1973.

Cleveland, Harlan. *The Future Executive: A Guide for Tomorrow's Managers*. New York: Harper & Row, 1972.

Cole, H.S.D., et al., eds. *Models of Doom--A Critique of the Limits to Growth*. New York: Universe Books, 1973.

Committee for Economic Development. Research and Policy Committee. *Building a National Health-Care System*. New York: Committee for Economic Development, 1973.

Commoner, Barry. *The Closing Circle: nature, man and technology*. New York: Alfred A. Knopf, 1971.

Conron, John. *The American Landscape; a critical anthology of prose and poetry*. New York: Oxford University Press, 1974.

Cotterman, William W. Computers in Perspective. Belmont, CA: Wadsworth Publishing Co., 1974.

Cox, Harvey G. The Secular City; secularization and urbanization in theological perspective. Revised edition. New York: Macmillan, 1966.

Cox, Robert W., and Jacobson, Harold K., et al. The Anatomy of Influence; decision making in international organizations. New Haven: Yale University Press, 1973.

Crenson, Matthew A. The Un-Politics of Air Pollution. Baltimore: Johns Hopkins University Press, 1971.

Crichton, Michael. Andromeda Strain. New York: Dell Publishing Co., 1971a.

________. Five Patients. New York: Bantam Books, 1971b.

________. The Terminal Man. New York: Bantam Books, 1974.

CRM Books Editorial Staff. Physical Science Today. Delmar, CA: CRM Books, 1973.

Curran, William J., and Shapiro, Donald E. Law, Medicine and Forensic Science. 2nd edition. Boston: Little, Brown & Co., 1970.

Curtis, Helena. Biology. New York: Worth Publishers, 1968.

Daedalus. "Ethical Aspects of Experimentation with Human Subjects." Spring 1969.

________. "Science and Its Public: A Changing Relationship." Summer 1974.

Dahl, Robert Alan. Modern Political Analysis. Englewood Cliffs, NJ: Prentice-Hall, 1963.

Dales, J.H. Pollution, Property and Prices. Toronto: University of Toronto Press, 1968.

Dalton, George, comp. Economic Development and Social Change: the modernization of village communities. Garden City, NY: published for the American Museum of Natural History by the Natural History Press, 1971.

Dampier, Sir William Cecil. History of Science and its Relations with Philosophy and Religion. 4th edition, revised. New York: Cambridge University Press, 1949.

Daniels, George H. Science in American Society; a social history. New York: Alfred A. Knopf, 1971.

Dante. The Divine Comedy. New York: Holt, Rinehart & Winston, 1962.

Darnell, Rezneat M. *Ecology and Man*. Dubuque, IA: WC Brown Co., 1973.

Dasmann, Raymond F. *Environmental Conservation*. New York: John Wiley & Sons, 1972.

Davenport, William H. *The One Culture*. New York: Pergamon Press, 1970.

Davenport, William H., and Rosenthal, Daniel, eds. *Engineering: Its Role and Function in Human Society*. New York: Pergamon Press, 1967.

Davidovitz, Paul. *Communication*.

Davis, David H. *Energy Politics*. New York: St. Martin's Press, 1974.

Davis, Nuell P. *Lawrence and Oppenheimer*. New York: Simon & Schuster, 1968.

Davis, P. William, and Solomon, Eldra. *The World of Biology: Life, Society, Ecosphere*. New York: McGraw-Hill, 1974.

Dawdy. *Mathematics: Science and Art*.

Day, John A., Fost, Frederick F., and Rose, Peter. *Dimensions of the Environmental Crisis*. New York: John Wiley & Sons, 1971.

De Bell, Garrett, comp. *The Environmental Handbook*. Prepared for the first national environmental teach-in. New York: Ballantine Books, 1970.

De Camp, Lyon Sprague. *The Ancient Engineers*. Garden City, NY: Doubleday & Co., 1963.

Dechert, Charles R., ed. *The Social Impact of Cybernetics*. Notre Dame: Notre Dame University Press, 1966.

De Greene, Kenyon B. *Sociotechnical Systems: Factors in Analysis, Design and Management*. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Delgado, Jose M.R. *Physical Control of the Mind; toward a psychocivilized society*. New York: Harper & Row, 1969.

De Nevers, Noel, ed. *Technology and Society*. Reading, MA: Addison-Wesley Publishing Co., 1972.

Derry, Thomas K., and Williams, Trevor I. *Short History of Technology from the Earliest Times to A.D. 1900*. Fair Lawn, NJ: Oxford University Press, 1961.

Detweiler, Robert, Sutherland, Jon N., and Werthman, Michael S. *Environmental Decay in its Historical Context*. Glenview, IL: Scott, Foresman & Co., 1973.

Detwyler, Thomas R., et al. *Urbanization and Environment*. Belmont, CA: Duxbury Press, 1972.

Deutsch, Karl W. The Nerves of Government: Models of Political Communication and Control. New York: Free Press, 1966.

Dickert, Thomas, and Domeny, Katherine, eds. Environmental Impact Assessment: Guidelines and Commentary. Berkeley: University of California, Berkeley, University Extension, 1974.

Dickson, David. Alternative Technologies and the Politics of Change. Glasgow, Scotland: Fontana, William Collins & Sons, 1974.

Diehl, Harold S. Tobacco and Your Health: the smoking controversy. New York: McGraw-Hill, 1969.

Disch, Robert, ed. The Ecological Conscience: values for survival. Englewood Cliffs, NJ: Prentice-Hall, 1970.

Dixon, Bernard. What is Science For? New York: Harper & Row, 1973.

Donaldson, W.V. "Continuing Education for City Managers," Public Administration Review, November-December 1973.

Dorf, Richard. Computers and Man. San Francisco: Boyd & Fraser Publishing Co., 1974a.

_______. Technology, Society and Man. San Francisco: Boyd & Fraser Publishing Co., 1974b.

Dorfman, Robert, and Dorfman, Nancy S., eds. Economics of the Environment. New York: WW Norton & Co., 1972.

Douglas, Jack D., ed. Freedom and Tyranny: Social Problems in a Technological Society. New York: Alfred A. Knopf, 1970.

_______. The Technological Threat. Holliswood, NY: Spectrum Publications, 1971.

Drucker, Peter F. The Age of Discontinuity: Guidelines to our Changing Society. New York: Harper & Row, 1969.

Dubos, Rene. Mirage of Health. NY: Harper & Row, 1959.

_______. Reason Awake. New York: Columbia University Press, 1970.

Dupree, A. Hunter. Science in the Federal Government; a history of policies and activities to 1940. Cambridge, MA: Belknap Press of Harvard University Press, 1957.

Ebbin, Steven, and Kasper, Raphael. Citizen Groups and the Nuclear Power Controversy. Cambridge, MA: MIT Press, 1974.

Edel, Matthew. Economics and the Environment. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Ehrlich, Paul R. The Population Bomb. New York: Ballantine Books, 1968.

Ehrlich, Paul R., and Ehrlich, Anne H. *Population, Resources, Environment*. San Francisco: WH Freeman & Co., 1970.

Ehrlich, Paul R., Ehrlich, Anne H., and Holdren, John P. *Human Ecology; problems and solutions*. San Francisco: WH Freeman & Co., 1973.

Einstein, Albert, and Infeld, Leopold. *Evolution of Physics*. New York: Simon & Schuster, 1961.

Eiseley, Loren C. *Darwin's Century; evolution and the men who discovered it*. Garden City, NY: Doubleday & Co., 1961.

________. *The Firmament of Time*. New York: Atheneum Publishers, 1960.

________. *Immense Journey*. New York: Random House, 1957.

Ellul, Jacques. *The Political Illusion*. New York: Alfred A. Knopf, 1967.

________. *The Technological Society*. New York: Alfred A. Knopf, 1964.

Emmet, Dorothy. *Whitehead's Philosophy of Organism*. New York: Macmillan, 1966.

Engels, Friedrich. *The Condition of the Working-Class in England*. Stanford, CA: Stanford University Press, 1968.

________. *Dialectics of Nature*. New York: International Publishers, 1940.

________. *Socialism: Utopian and Scientific*. New York: Pathfinder Press, 1972.

Engineering Concepts Curriculum Projects (ECCP). *Man and His Technology: Problems and Issues*. New York: McGraw-Hill, 1973.

________. *Man-Made World*. New York: McGraw-Hill, 1968.

Engler, Robert. *The Politics of Oil; a study of private power and democratic directions*. Chicago: University of Chicago Press, 1969.

Environmental Law Institute. *Federal Environmental Law*.

Etzioni, Amitai. *The Active Society*. New York: Free Press, 1968.

Euripides. *The Bacchae*.

Ewing, A.C. *Ethics*. New York: Free Press, 1965.

Fabricant, Neil, and Hallman, Robert. *Toward a Rational Power Policy: Energy, Politics and Pollution*. New York: George Braziller, 1971.

Fabun, Don. The Dynamics of Change. Englewood Cliffs, NJ: Prentice-Hall, 1967.

_______. Three Roads to Awareness. Beverly Hills, CA: Glencoe Press, 1970.

Faramelli, Norman J. Technethics: Christian Mission in an Age of Technology. New York: Friendship Press, 1971.

Farrington, Benjamin. Greek Science; its meaning for us. Harmondsworth, Middlesex: Penguin Books, 1961.

Faunce, William A. Problems of an Industrial Society. New York: McGraw-Hill, 1968.

Felsen, Henry G. Hot Rod. New York: Bantam Books, 1970.

Ferkiss, Victor C. The Future of Technological Civilization. New York: George Braziller, 1974.

_______. Technological Man. New York: George Braziller, 1969.

Finley, M.I. Ancient Greeks: An Introduction to their life and thought. New York: Oxford University Press, 1971.

Fischer, Robert B. Science, Man and Society. Philadelphia: WB Saunders Co., 1971.

Fitch, James Marston. American Building. Vol. I: the historical forces that shape it. Boston: Houghton Mifflin Co., 1966.

Flaubert, Gustav. Bouvard and Peuchat. New York: New Directions Publishing Corp., 1971.

_______. Selected Letters. Plainview, NY: Books for Libraries, 1953.

Fletcher, Joseph F. The Ethics of Genetic Control. Garden City, NY: Anchor Books, 1974.

_______. Situation Ethics; the new morality. Philadelphia: Westminster Press, 1966.

Forbes, Robert J. Man the Maker; a history of technology and engineering. New York: Schuman, 1950.

Ford Foundation Energy Policy Project. Exploring Energy Choices: A Preliminary Report. New York: Ford Foundation, 1974a.

_______. A Time to Choose: America's Energy Future. Cambridge, MA: Ballinger Publishing Co., 1974b.

Forrester, Jay W. Principles of Systems. Cambridge, MA: Wright Allen Press, 1968.

Foster, George M. Traditional Societies and Technological Change. 2nd edition. New York: Harper & Row, 1973.

Frankena, William. Ethics. 2nd edition. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Freed, Roy N. Computers and Law--A Reference Work. 4th edition. Boston: Roy N. Freed, c/o Peabody, Brown, Rowley & Storey, 1974.

Freeman, A. Myrick, et al. The Economics of Environmental Policy. New York: John Wiley & Sons, 1973.

Freeman, David. Technology and Society: Issues in Assessment. Chicago: Rand McNally & Co., 1974.

Freeman, S. David. Energy: The New Era. New York: Walker & Co., 1974.

Freud, Sigmund. Civilization and Its Discontents. New York: WW Norton & Co., 1962.

Fried, Edward R., Rivlin, Schultze, and Teeters. Setting National Priorities: the 1974 Budget. Washington, DC: The Brookings Institution, 1973.

Friedlander, Michael W. The Conduct of Science. Englewood Cliffs, NJ: Prentice-Hall, 1972.

Friedmann, Wolfgang. The Future of the Oceans. New York: George Braziller, 1971.

Fritsch, Albert J. The Contrasumers: A Citizens Guide to Resource Conservation. New York: Praeger Publishers, 1974.

Fromm, Erich, ed. Marx's Concept of Man. New York: F. Ungar Publishing Co., 1961.

Fuchs, Victor R. Who Shall Live? New York: Basic Books, 1975.

Fuchs, Victor R., and Leveson, Irving F. The Service Economy. New York: National Bureau of Economic Research, Columbia University Press, 1968.

Fuller, R. Buckminster. Operating Manual for Spaceship Earth. New York: Simon & Schuster, 1969.

Gagliano, Sherwood M. Canals, Dredging in the Louisiana Coastal Zone.

Galbraith, John K. Economics and the Public Purpose. Boston: Houghton Mifflin Co., 1973.

________. How to Control the Military. New York: Signet, 1969.

________. The New Industrial State. New York: Signet, 1967.

Gamow, George. Thirty Years that Shook Physics. Garden City, NY: Anchor Books, 1969.

Gardner, Eldon J. History of Biology. 3rd edition. Minneapolis: Burgess Publishing Co., 1972.

Garvey, Gerald. Energy, Ecology, Economy. New York: WW Norton & Co., 1972.

Geertz, Clifford. Agricultural Involution: the processes of ecological change in Indonesia. Berkeley: University of California Press, 1963.

Gewirth, Alan. Political Philosophy. New York: Macmillan, 1965.

Giancoli, Douglas C. The Ideas of Physics. New York: Harcourt Brace Jovanovich, 1974.

Giddings, J. Calvin. Chemistry, Man and Environmental Change. San Francisco: Canfield Press, 1973.

Giddings, J. Calvin, and Monroe, Manus B. Our Chemical Environment. San Francisco: Canfield Press, 1972.

Gillispie, Charles C. The Edge of Objectivity: An Essay in the History of Scientific Ideas. Princeton: Princeton University Press, 1960.

________. Genesis and Geology: A Study in the Relations of Scientific Thought, Natural Theology, and Social Opinion in Great Britain. Santa Fe, NM: William Gannon, 1970.

Ginestier, Paul. Poet and the Machine. New Haven: College & University Press, 1961.

Girvetz, Harry K. Contemporary Moral Issues. Belmont, CA: Wadsworth Publishing Co., 1974.

Goettel, Elinor. America's Wars--Why? New York: Julian Messner, 1972.

Goldberg, Maxwell H. Design in Liberal Learning. San Francisco: Jossey-Bass, 1971.

Goldman, Marshall I. Spoils of Progress: Environmental Pollution in the Soviet Union. Cambridge, MA: MIT Press, 1972.

Goldsby, R.A. Race and Races. New York: Macmillan, 1971.

Goldstein. Patent, Copyright, Trademark and Related State Law Doctrines.

Golembiewski, Robert T., Welsh, William A., and Crotty, William J. A Methodological Primer for Political Scientists. Chicago: Rand-McNally & Co., 1969.

Goode, Erich. Drugs in American Society. New York: Alfred A. Knopf, 1972.

Goodman, D.C. Science and Religious Belief 1600-1900: A Selection of Primary Sources. 1973.

______. Science and the Rise of Technology Since 1800. Bristol: John Wright & Sons, 1972.

Goodman, Michael R. Study Notes in System Dynamics. Cambridge, MA: Wright Allen Press, 1974.

Goran, Morris H. The Future of Science. New York: Spartan Books, 1971.

______. Science and Anti-Science. Ann Arbor: Science Publishers, 1974.

Gotlieb, C.C., and Borodin, A. Social Issues in Computing. New York: Academic Press, 1973.

Goudge, Thomas A. The Ascent of Life. London: G.Allen & Unwin, 1961.

Goulet, Denis. Cruel Choice: A New Concept in the Theory of Development. New York: Atheneum Publishers, 1971.

Gray, Oscar S. Cases and Materials on Environmental Law. Washington, DC: Bureau of National Affairs, 1970.

Greenberg, Daniel S. The Politics of Pure Science. New York: New American Library, 1967.

Greenburg. The Science Establishment.

Greenwood, Ned H., and Edwards, J.M.B. Human Environments and Natural Systems: A Conflict of Dominion. Belmont, CA: Duxbury Press, 1973.

Greer, Scott. The Emerging City, Myth and Reality. New York: Free Press, 1962.

Grodzins, Morton, and Rabinavitch, Eugene, eds. The Atomic Age; forty-five scientists and scholars speak. New York: Simon & Schuster, 1965.

Gullion, Edmund A., ed. Uses of the Seas. Englewood Cliffs, NJ: Prentice-Hall, 1968.

Habakkuk, H.J. American and British Technology in the 19th Century. New York: Cambridge University Press, 1967.

Haberer, Joseph. Politics and the Community of Science. New York: Van Nostrand Reinhold, 1969.

Habermas, Jurgen. Toward a Rational Society; student protest, science and politics. Boston: Beacon Press, 1970.

Hagman, Donald G. Public Planning and Control of Urban and Land Development: cases and materials. St. Paul, MN: West Publishing Co., 1973.

Halacy, Daniel S., Jr. The Coming Age of Solar Energy. Revised edition. New York: Harper & Row, 1973.

Hall, Edward T. The Hidden Dimension. New York: Doubleday & Co., 1966.

Hamilton, Michael P., ed. The New Genetics and the Future of Man. Grand Rapids: William B. Eerdmans Publishing Co., 1972.

Hammond, Allen L., Metz, William D., and Maugh, Thomas H., III. Energy and the Future. Washington, DC: American Association for the Advancement of Science, 1973.

Hanks, Eva H., Tarlock, A. Dan, and Hanks, John L. Cases and Materials on Environmental Law and Policy. St. Paul, MN: West Publishing Co., 1974.

Hanson, Norwood R. Patterns of Discovery: an enquiry into the conceptual foundations of science: 1958-1965. New York: Cambridge University Press, 1965.

Hardin, Garrett. Exploring New Ethics for Survival: The Voyage of the Spaceship Beagle. Baltimore: Penguin Books, 1972.

Hare, Van C., Jr. An Introduction to Programming: A BASIC Approach. New York: Harcourt Brace Jovanovich, 1970.

Harre, H.R. The Philosophies of Science: An Introductory Survey. New York: Oxford University Press, 1972.

Harrington, Michael. The Accidental Century. Baltimore: Penguin Books, 1965.

Harrison, John F., ed. Birth and Growth of Industrial England 1714-1867. New York: Harcourt Brace Jovanovich, 1973.

Harriss, C. Lowell, ed. The Good Earth of America: Planning Our Land Use. Englewood Cliffs, NJ: Prentice-Hall, 1974.

Harte, John, and Socolow, Robert H. Patient Earth. New York: Holt, Rinehart & Winston, 1971.

Harvard Educational Review Reprint Series #2. Environment, Heredity, and Intelligence. 1969.

Hastings, Margaret. Medieval European Society, One Thousand to Fourteen Fifty. New York: Random House, 1970.

Havighurt, Clark C., ed. *Regulating Health Facilities Construction.* Symposium proceedings. Washington, DC: American Enterprise Institute for Public Policy Research, 1974.

Healy, Timothy J. *Energy, Electric Power, and Man.* San Francisco: Boyd and Fraser Publishing Co., 1974.

Heilbroner, Robert L. *An Inquiry into the Human Prospect.* New York: WW Norton & Co., 1974.

_______. *The Making of Economic Society.* 4th edition. Englewood Cliffs, NJ: Prentice-Hall, 1972.

Heilbrun, James. *Urban Economics and Public Policy.* New York: St. Martin's Press, 1973.

Heimstra, N.W., and McFarling, L.H. *Environmental Psychology.* Monterey, CA: Brooks/Cole Publishing Co., 1974.

Heller, Alfred, ed. *The California Tomorrow Plan.* Los Altos, CA: William Kaufman, 1972.

Helmer, Olaf. *Social Technology.* New York: Basic Books, 1966.

Hemingway, Ernest. *Farewell to Arms.* New York: Charles Scribner's Sons, 1929.

Hendricks, David W., et al., eds. *Environmental Design for Public Projects.* Prepared for NSF-RANN. Fort Collins, CO: Water Resources Publications, 1975.

Hetman, Francois. *Society and the Assessment of Technology.* Paris: Organization for Economic Cooperation and Development, 1973.

Hetzler, Stanley A. *Technological Growth and Social Change: Achieving Modernization.* New York: Praeger Publishers, 1969.

Hill, John W., ed. *Chemistry for Changing Times.* Minneapolis: Burgess Publishing Co., 1975.

Hilton, Bruce, et al., eds. *Ethical Issues in Human Genetics.* New York: Plenum Press, 1973.

Hindle, Brooke. *The Pursuit of Science in Revolutionary America 1735-1789.* New York: WW Norton & Co., 1974.

Hinrichs, Harley, and Taylor, Graeme. *Program Budgeting and Benefit-Cost Analysis: cases, text, and readings.* Pacific Palisades, CA: Goodyear Publishing Co., 1969.

Hirsch, Walter. *Scientists in American Society.* Westminster, MD: Random House, 1968.

Hirschman, Albert O. *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States*. Cambridge, MA: Harvard University Press, 1970.

Hoffman, Frederick J. *The Twenties: American Writing in the Postwar Decade*. New York: Free Press, 1965.

Hoffmann, Banesh. *Strange Story of the Quantum*. 2nd edition. New York: Dover Publications, 1959.

Holdren, John P., and Herrera, Philip. *Energy; a crisis in power*. San Francisco: Sierra Club, 1971.

Hooykass, R. *Religion and the Rise of Modern Science*. Grand Rapids: William B. Eerdmans Publishing Co., 1972.

Horton, Paul B., and Leslie, Gerald R. *The Sociology of Social Problems*. 2nd edition. New York: Appleton-Century-Crofts, 1960.

Hull, David L. *Philosophy of Biological Science*. Englewood Cliffs, NJ: Prentice-Hall, 1974.

Hundley, Norris, Jr. *Dividing the Waters: a century of controversy between the United States and Mexico*. Berkeley: University of California Press, 1966.

Huxley, Aldous. *Brave New World*. New York: Harper & Row, 1968.

________. *Island*. New York: Harper & Row, 1972.

Ibsen, Henrik. *An Enemy of the People*.

Inglis, David R. *Nuclear Energy: Its Physics and Its Social Challenge*. Reading, MA: Addison-Wesley Publishing Co., 1973.

Ishida, Takeshi. *Japanese Society*. New York: Random House, 1971.

Issawi, Charles. *Oil, the Middle East, and the World*. New York: Library Press, 1972.

Ittelson, William H., et al. *An Introduction to Environmental Psychology*. New York: Holt, Rinehart & Winston, 1974.

Jackson, Wes, ed. *Man and the Environment*. Dubuque, IA: WC Brown & Co., 1973.

Jantsch, Erich. *Technology Forecasting in Perspective*. Paris: Organization for Economic Cooperation and Development, 1967.

Jastrow, Robert. *Red Giants and White Dwarfs; the evolution of stars, planets, and life*. New York: New American Library, 1971.

Jeffries, Theodore W. Science in Civilization. Dubuque, IA: Kendall/Hunt Publishing Co., 1971.

Jersild, P.T., and Johnson, D.A. Moral Issues and Christian Response. New York: Holt, Rinehart & Winston, 1971.

Jevons, Frederick R. Science Observed. London: Allen & Unwin, 1973.

Johnson, Nicholas. How to Talk Back to Your Television Set. Boston: Little, Brown & Co., 1970.

Johnston, David O., Netterville, J.T., Wood, J.L., and Jones, M.M. Chemistry and the Environment. Philadelphia: WB Saunders Co., 1973.

Johnston, Douglas M. International Law of Fisheries; a framework for policy oriented inquiries. New Haven: Yale University Press, 1965.

Jones, Alan, and Bodmer, Walter F. Our Future Inheritance; Choice or Chance? A study by a British Association Working Party. New York: Oxford University Press, 1974.

Jones, Martin V. A Technology Assessment Methodology. Washington, DC: Mitre Corporation Washington Operations, 1971.

Josephson, Eric, ed. Man Alone; alienation in modern society. New York: Dell Publishing Co., 1962.

Joyce, James. Ulysses. New York: Random House.

Jungk, Robert. Brighter than One Thousand Suns. New York: Harcourt Brace Jovanovich, 1958.

Kahn, Herman, and Bruce-Briggs, B. Things to Come: thinking about the seventies and eighties. New York: Macmillan, 1972.

Kaplan, Abraham. The Conduct of Inquiry. San Francisco: Chandler Publishing Co., 1964.

Kaplan, David, and Manners, Robert A. Culture Theory. Englewood Cliffs, NJ: Prentice-Hall, 1972.

Kargon, Robert Hugh. The Maturing of American Science. Washington, DC: American Association for the Advancement of Science, 1974.

Kash, Don E., et al. Energy Under the Oceans. Norman: University of Oklahoma Press, 1973.

Kast, Fremont E., and Rosenzweig, James E. Organization and Management: A Systems Approach. New York: McGraw-Hill, 1970.

Katz. Jay. Experimentation with Human Beings. New York: Russell Sage Foundation, 1972.

Katz, Jay, Goldstein, Joseph, and Dershowitz, Alan M. Psychoanalysis, Psychiatry and Law. New York: Free Press, 1967.

Kearney, Hugh F. Science and Change, 1500-1700. New York: McGraw-Hill, 1971.

Keeton, Page, and Shapo, Marshall S. Products and the Consumer: Defective and Dangerous Products. Mineola, NY: Foundation Press, 1970.

Kelley, Joe. Organizational Behaviour. Homewood, IL: Richard D. Irwin, 1974.

Keohane, Robert O., and Nye, Joseph S., Jr., eds. Transnational Relations in World Politics. Center for International Affairs Series. Cambridge, MA: Harvard University Press, 1972.

Keyes, Daniel. Flowers for Algernon. New York: Harcourt, Brace & World, 1966.

Kieffer, William F. Chemistry, a Cultural Approach. New York: Harper & Row, 1971.

Klaw, Spencer. The New Brahmins: Scientific Life in America. New York: William Morrow & Co., 1968.

Klemm, Friedrich. A History of Western Technology. Cambridge, MA: MIT Press, 1964.

Knelman, Fred H., ed. 1984 and All That. Belmont, CA: Wadsworth Publishing Co., 1971.

Koestler, Arthur. The Case of the Midwife Toad. London: Hutchinson, 1971.

Kozlovsky, Daniel G., ed. An Ecological and Evolutionary Ethic. Englewood Cliffs, NJ: Prentice-Hall, 1974.

Krantz, David L., ed. Schools of Psychology: A Symposium. Englewood Cliffs, NJ: Prentice-Hall, 1970.

Kranzberg, Melvin, and Davenport, W.H., eds. Technology and Culture. New York: Schocken Books, 1972.

Kranzberg, Melvin, and Pursell, Carroll W., Jr. Technology in Western Civilization. 2 vols. Toronto: Oxford University Press, 1967.

Krieghbaum, Hillier. Science and the Mass Media. New York: New York University Press, 1967.

Krier, J. Environmental Law and Policy. Indianapolis, IN: Bobbs-Merrill Co., 1971.

Krimerman, L., ed. The Nature and Scope of Social Science: A Critical Anthology. Englewood Cliffs, NJ: Prentice-Hall, 1969.

Kubler-Ross, Elizabeth. *On Death and Dying*. New York: Macmillan, 1969.

Kuhn, Thomas S. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1970.

Kuhns, William. *The Post-Industrial Prophets*. New York: Weybright & Talley, 1971.

Lakatos, Imre, and Musgrave, Alan, eds. *Criticism and the Growth of Knowledge*. Cambridge: Cambridge University Press, 1970.

Lakoff, Sanford A. *Knowledge and Power*. New York: The Free Press, 1966.

Lama Foundation. *Be Here Now*. New York: Crown Publishers, 1971.

Lambright, W.H. *Governing Science and Technology*. Fairlawn, NJ: Oxford University Press, 1976.

________. *Shooting Down the Nuclear Plane*. Indianapolis, IN: Bobbs-Merrill Co., 1967.

Landes David S. *The Unbound Prometheus*. Cambridge: Cambridge University Press, 1969.

Langford, Jerome J. *Galileo, Science, and the Church*. New York: Desclee Co., 1966.

Lapp, Ralph E. *The Logarithmic Century*. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Lauda, Donald P., and Ryan, Robert D., comps. *Advancing Technology: Its Impact on Society*. Dubuque, IA: WC Brown Co., 1971.

Layton, Edwin T., Jr., ed. *Technology and Social Change in America*. New York: Harper & Row, 1973.

Leach, Gerald. *The Biocrats*. New York: McGraw-Hill, 1970.

Leavitt, Helen. *Superhighway--Superhoax*. Garden City, NY: Doubleday & Co., 1970.

Lehmann, Paul L. *Ethics in a Christian Context*. New York: Harper & Row, 1963.

Leopold, Aldo. *A Sand County Almanac*. New York: Sierra Club/Ballantine Books, 1970.

Lerner, I. Michael. *Heredity, Evolution, and Society*. San Francisco: WH Freeman & Co., 1968.

________(2). *Man's Genetic Inheritance*.

Leuchtenberg, William E. The Perils of Prosperity, 1914-1932. Chicago: University of Chicago Press, 1958.

Levi, Edward H. Introduction to Legal Reasoning. Chicago: University of Chicago Press, 1962.

Lewis, Arthur O., Jr., ed. Of Men and Machines. New York: EP Dutton & Co., 1963.

Lewis, Richard S., and Wilson, Jane, eds. Alamogordo Plus 25 Years. New York: Viking Press, 1971.

Lewis, Sinclair. Dodsworth. New York: New American Library, 1971.

Lilly, John. The Centers of the Cyclone. New York: Bantam Books, 1973.

Lindblom, Charles. The Policy-Making Process. Englewood Cliffs, NJ: Prentice-Hall, 1967.

Littauer, Ralph, and Uphoff, Norman, eds. Air War in Indochina. Boston: Beacon Press, 1972.

Losee, John. A Historical Introduction to the Philosophy of Science. New York: Oxford University Press, 1972.

MacQuarrie, John. Three Issues in Ethics. New York: Harper & Row, 1970.

Madden, Edward H. Structure of Scientific Thought. New York: Houghton Mifflin Co., 1960.

Maddox, John. The Doomsday Syndrome. New York: McGraw-Hill, 1972.

Majumder, Sanat K. The Drama of Man and Nature. Columbus, OH: Charles E. Merrill Publishing Co., 1971.

Manahan. Environmental Chemistry.

Mansfield, Edwin. The Economics of Technological Change. New York: WW Norton & Co., 1968.

Manuel, Frank Edward. Portrait of Isaac Newton. Cambridge, MA: Belknap Press of Harvard University Press, 1968.

March, Robert H. Physics for Poets. New York: McGraw-Hill, 1970.

Marcuse, Herbert. Eros and Civilization. Boston: Beacon Press, 1974.

Marion, Jerry B. Energy in Perspective. New York: Academic Press, 1974.

_______. Physics: The Foundations of Modern Society. New York: John Wiley & Sons, 1973.

Marriott, McKim. Kishan Garhi (text and slides).

Marsak, Leonard M., ed. The Rise of Science in Relation to Society. New York: Macmillan, 1964.

Martin, James. Future Developments in Telecommunications. Englewood Cliffs, NJ: Prentice-Hall, 1969.

Martin, James, and Norman, Adrian R.D. The Computerized Society. Englewood Cliffs, NJ: Prentice-Hall, 1970.

Martin, Kingsley. French Liberal Thought in the 18th Century. New York: Harper & Row, 1966.

Martin, Lawrence. Arms and Strategy. New York: David McKay Co., 1973.

Martino, Joseph P. Technological Forecasting for Decision Making. New York: American Elsevier Publishing Co., 1972.

Marx, Karl. Precapitalist Economic Formations. New York: International Publishers Co., 1965.

_______. Writings of the Young Marx on Philosophy and Society. Garden City, NY: Doubleday & Co., 1967.

Marx, Karl, and Engels, Friedrich. The Communist Manifesto. Chicago: Henry Regnery Co., 1969.

_______________. The German Ideology. New York: International Publishers Co., 1970.

Marx, Leo. The Machine in the Garden; technology and the pastoral ideal in America. New York: Oxford University Press, 1964.

Mason, Stephen F. A History of the Sciences. New York: Macmillan, 1966.

Mason, William H., and Folkerts, George W. Environmental Problems: Principles, Readings, and Comments. Dubuque, IA: William C. Brown & Co., 1973.

Matson, Floyd W. The Broken Image. New York: George Braziller, 1964.

Maunder, W.J. The Value of the Weather. New York:, Barnes & Noble, 1970.

McAlester, A.L. History of Life. Englewood Cliffs, NJ: Prentice-Hall, 1968.

McCartney, James. Yoga: The Key to Life.

McCormick, E.J. Human Factors Engineering. New York: McGraw-Hill, 1970.

McHale, John. World Facts and Trends. New York: Macmillan, 1972.

McHarg, Ian L. Design with Nature. Garden City, NY: Natural History Press, 1969.

McKeown, Thomas, and Lowe, C.R. Introduction to Social Medicine. Philadelphia: JB Lippincott Co., 1974.

McLuhan, Marshall. Understanding Media: the extensions of man. New York: New American Library, 1973.

McPhee, John. The Curve of Binding Energy. New York: Farrar, Straus & Giroux, 1974.

Mead, George H. Mind, Self, and Society; from the standpoint of a social behaviorist. Chicago: University of Chicago Press, 1934.

Mead, Margaret. Culture and Commitment. Garden City, NY: Natural History Press, 1970.

Meadows, Donella H., et al. The Limits to Growth. New York: Universe Books, 1972.

Mechanic, David. Medical Sociology: a selective view. New York: Free Press, 1968.

Medvedev, Zhores A. The Rise and Fall of TD Lysenko. New York: Columbia University Press, 1969.

Medvin, Norman. The Energy Cartel: Who Runs the American Oil Industry. New York: Vintage Books, 1974.

Meek, Ronald L., ed. Marx and Engels on the Population Bomb. Palo Alto, CA: Ramparts Press, 1971.

Meek, Roy L., and Straayer, John A. The Politics of Neglect: the environmental crisis. Boston: Houghton Mifflin Co., 1971.

Merton, Robert K. Science, Technology and Society in 17th Century England. New York: Harper & Row, 1970.

Mesarovic, Mihajlo, and Pestel, Eduard. Mankind at the Turning Point. New York: EP Dutton/Readers' Digest Press, 1974.

Mesthene, Emmanuel G. Technological Change: Its Impact on Man and Society. New York: Mentor Press, 1970.

Meyer, John R., et al. Urban Transportation Problems. Cambridge, MA: Harvard University Press, 1965.

Meyers and Tarlock. *Legal and Economic Aspects of Environmental Protection*. Mineola, NY: Foundation Press, 1971.

_______ (2). *Water Resource Management*. Mineola, NY: Foundation Press.

Michael, Donald N. *The Unprepared Society*. New York: Basic Books, 1968.

Michalos, Alex C., ed. *Philosophical Problems of Science and Technology*. Boston: Allyn & Bacon, 1974.

Mill, John Stuart. *August Comte and Positivism*. Ann Arbor: University of Michigan Press, 1961.

_______. *Autobiography*. Indianapolis, IN: Bobbs-Merrill Co., 1957.

_______. *Philosophy of Scientific Method*.

_______. *Utilitarianism, On Liberty, Essay on Bentham*. Cleveland: World Publishing Co., 1970.

Miller, Dave. *Advent II*. Special instructional materials.

Miller (2). *Kinetics, Energetics, and Life*.

Mitcham, Carl, and Mackey, Robert, eds. *Philosophy and Technology*. New York: Free Press, 1972.

Mitchell, James K. *Community Response to Coastal Erosion: Individual and Collective Adjustments to Hazard on the Atlantic Shore*. Chicago: University of Chicago Department of Geography, 1974.

Mitre Corporation. *A Technology Assessment Methodology...1971*. Washington, DC: Mitre Corporation Washington Operation, 1971.

Monod, Jacques. *Chance and Necessity*. New York: Vintage Books, 1971.

Montgomery, John D. *Technology and Civic Life*. Cambridge, MA: MIT Press, 1974.

Moore, Wilbert E. *The Impact of Industry*. Englewood Cliffs, NJ: Prentice-Hall, 1965.

Moore, Wilbert E., ed. *Technology and Social Change*. New York: Watts, Franklin, 1972.

Moos, Rudolf H., and Insel, Paul M., eds. *Issues in Social Ecology: Human Milieus*. Palo Alto, CA: Mayfield Publishing Co., 1974.

More, Sir Thomas. *Utopia*. Baltimore: Penguin Books, 1965.

Morgan, Elaine. The Descent of Woman. New York: Bantam Books, 1973.

Morison, Elting E. Men, Machines, and Modern Times. Cambridge, MA: MIT Press, 1966.

Morris, Desmond. The Naked Ape. New York: Dell Publishing Co., 1969.

Morris, William. News from Nowhere. Boston: Routledge & Kegan, 1970.

Motley, Wilma E. Ethics and Jurisprudence History for the Dental Hygienist. Philadelphia: Lea & Febiger, 1975.

Muller, Herbert J. The Children of Frankenstein. Bloomington: Indiana University Press, 1970.

_______. Uses of the Future. Bloomington: Indiana University Press, 1974.

Mumford, Lewis. Art and Technics. New York: Columbia University Press, 1952.

_______. The City in History: Its Origins, Its Transformations, and Its Prospects. New York: Harcourt, Brace & World, 1961.

_______. The Myth of the Machine: Technics and Human Development. Vol. I. New York: Harcourt Brace Jovanovich, 1966.

_______. The Pentagon of Power: The Myth of the Machine, Volume 2. New York: Harcourt Brace Jovanovich, 1970.

_______. Technics and Civilization. New York: Harcourt, Brace & Co., 1934.

Munson, Ronald, ed. Man and Nature. New York: Dell Publishing Co., 1971.

Murdoch, William W., ed. Environment--Resources, Pollution and Society. Stamford, CT: Sinauer Associates, 1971.

Musson, Albert E., ed. Science, Technology and Economic Growth in the 18th Century. London: Methuen & Co., 1972.

Nader, Ralph. Unsafe at Any Speed. New York: Grossman Publishers, 1965.

Nash, Roderick. Wilderness and the American Mind. New Haven: Yale University Press, 1973.

Natanson, Maurice A. Philosophy of Social Sciences, a reader. New York: Random House, 1963.

National Academy of Engineering (NAE). A Study of Technology Assessment. A Report to the Committee on Science and Astronautics. July 1969.

National Academy of Sciences (NAS). Materials and Man's Needs. Science and Public Policy Committee. Committee on the Survey of Materials Science and Engineering. NAS, 1974.

_______. Maternal Nutrition and Course of Pregnancy. Food and Nutrition Board. Division of Biology and Agriculture. NAS, 1970.

National Academy of Science-National Research Council (NAS-NRC). Resources and Man. San Francisco: WH Freeman & Co., 1969a.

_______. Panel on Technology Assessment. Technology: Processes of Assessment and Choice. Prepared for the U.S. Congress, House of Representatives, Committee on Science and Astronautics. Washington, DC: USGPO, 1969b.

Nau, Henry R. National Politics and International Technology: Nuclear Reactor Development in Western Europe. Baltimore: Johns Hopkins University Press, 1974.

Nelkin, Dorothy. Jetport: The Boston Airport Controversy. Social Policy Series. New Brunswick, NJ: Transaction Books, 1974.

_______. Nuclear Power and Its Critics: The Cayuga Lake Controversy. Ithaca, NY: Cornell University Press, 1971.

Nelson, James B. Human Medicine: Ethical Perspective on New Medical Issues. Minneapolis: Augsburg Publishing House, 1973.

Nelson, Richard R., et al. Technology, Economic Growth and Public Policy. Washington, DC: The Brookings Institution, 1967.

Nesbitt, William A. Teaching About War and War Prevention. New York: Thomas Y. Crowell, 1971.

Neugarten, Bernice L., ed. Middle Age and Aging: A Reader in Social Psychology. Chicago: University of Chicago Press, 1968.

Newton, David E. Science and Society. Boston: Holbrook Press, 1974.

Nicklanovich, M. From Cell to Philosopher. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Niebuhr, Reinhold. Moral Man and Immoral Society. New York: Charles Scribner's Sons, 1932.

Nietzsche, Friedrich. A Genealogy of Morals. New York: Macmillan, 1897.

_______. Thoughts Out of Season. New York: Gordon Press, 1974.

_______. The Will to Power in Nature. New York: Random House, 1968.

Nisbet, Robert A. The Sociological Tradition. New York: Basic Books, 1967.

Nogar, Raymond. The Wisdom of Evolution. Garden City, NY: Doubleday & Co., 1963.

Norman, Maxwell. Dimensions of the Future. New York: Holt, Rinehart & Winston, 1974.

Novick, Sheldon. The Careless Atom. Boston: Houghton Mifflin Co., 1969.

Nye, Russel B. The Unembarrassed Muse: the popular arts in America. New York: Dial Press, 1970.

Odell, Peter. Oil and World Power: Background to the Oil Crisis. Baltimore: Penguin Books, 1974.

Odum, Betty, and Odum, H.T. Energy Basis for Man and Nature.

Odum, Eugene P. Fundamentals of Ecology. Philadelphia: WB Saunders Co., 1953.

Oliver, John William. History of American Technology. New York: Ronald Press Co., 1956.

Olson, Mancur, and Landsberg, Hans J. The No-Growth Society. New York: WW Norton & Co., 1974.

Olson, Richard, comp. Science as Metaphor. Belmont, CA: Wadsworth Publishing Co., 1971.

Omega East. Wright Brother.

Organization for Economic Cooperation and Development (OECD). Science, Growth and Society: a new perspective. Report of the Secretary-General's ad hoc group on New Concepts of Science Policy. Paris: OECD, 1971.

Orwell, Gecrge. 1984. New York: New American Library, 1971.

______. The Road to Wigan Pier. New York: Harcourt Brace Jovanovich, 1972.

Owen, Wilfred. The Accessible City. Washington, DC: The Brookings Institution, 1972.

Park, Charles F., Jr. Affluence in Jeopardy: Minerals and the Political Economy. San Francisco: Freeman, Cooper & Co., 1968.

Park, Charles F., and Park, Margaret C. Earthbound: Minerals, Energy, and Man's Future. San Francisco: WH Freeman & Co., 1975.

Parkman, Ralph. The Cybernetic Society. New York: Pergamon Press, 1972.

Passmore, John. The Perfectability of Man. New York: Charles Scribner's Sons, 1971.

Pate, James E. Local Government and Administration: Principles and Problems. New York: American Book Co., 1954.

Paterson, Thomas G. The Origins of the Cold War. 2nd edition. Lexington, MA: DC Heath Co., 1974.

Pauling, Linus. Vitamin C and the Common Cold. San Francisco: WH Freeman & Co., 1970.

Paulsen, David F., and Denhardt, Robert B., eds. Pollution and Public Policy: a book of readings. New York: Dodd, Mead & Co., 1973.

Pelto, Pertti J. The Snowmobile Revolution: Technology and Social Change in the Arctic. Menlo Park, CA: Cummings Publishing Co., 1973.

Peterson, Grace G. Working with Others for Patient Care. Dubuque, IA: WC Brown Co., 1973.

Phillips, Jewell. Municipal Government and Administration in America. New York: Macmillan, 1960.

Phillips, W.B. Physics for Society. Reading, MA: Addison-Wesley Publishing Co., 1971.

Piaget, Jean. Structuralism. New York: Basic Books, 1970.

Piel, E.J., and Truxal, J.G. Man and His Technology: Problems and Issues. New York: McGraw-Hill, 1973.

Pirages, Dennis C., and Ehrlich, Paul R. Arc II; social response to environmental imperatives. New York: Viking Press, 1974.

Pirie, R. Gordon, ed. Oceanography: Readings in Contemporary Ocean Sciences. New York: Oxford University Press, 1973.

Pirsig, Robert M. Zen and the Art of Motorcycle Maintenance; an inquiry into values. New York: William Morrow & Co., 1971.

Pisar, Samual. Coexistence and Commerce. New York: McGraw-Hill, 1970.

Plato. Republic. New York: Basic Books, 1968.

Polanyi, Michael. Science, Faith and Society. Chicago: University of Chicago Press, 1964.

________. The Tacit Dimension. Garden City, NY: Doubleday & Co., 1966.

Polenberg, Richard. War and Society; the U.S. 1941-45. Philadelphia: JB Lippincott Co., 1972.

Poplin, Dennis. Communities: A Survey of Theories and Methods of Research. New York: Macmillan, 1972.

Potter, David M. People of Plenty. Chicago: University of Chicago Press, 1954.

Potter, Van Rennselaer. Bioethics: bridge to the future. Englewood Cliffs, NJ: Prentice-Hall, 1971.

Prall, David W. Aesthetic Analysis. New York: Thomas Y. Crowell Co., 1936.

Pressman, Jeffrey L., and Wildavsky, Aaron B. Implementation: How Great Expectations in Washington are Dashed in Oakland, or, Why It's Amazing that Federal Programs Work at All. Berkeley: University of California, 1974.

Price, Derek J. Little Science Big Science. New York: Columbia University Press, 1963.

Price, Don K. The Scientific Estate. Cambridge, MA: Belknap Press of Harvard University Press, 1965.

Priest, Joseph. Problems of our Physical Environment--Energy, Transportation, Pollution. Reading, MA: Addison-Wesley Publishing Co., 1973.

Primack, Joel, and von Hippel, Frank. Advice and Dissent: Scientists in the Political Arena. New York: Basic Books, 1974.

Pursell, Carroll W., comp. Readings in Technology and American Life. New York: Oxford University Press, 1969.

Pylyshyn, Zenon W. Perspectives on the Computer Revolution. Englewood Cliffs, NJ: Prentice-Hall, 1970.

Radio Corporation of America (RCA) Service Company, Inc. Atomic Radiation. Camden, NJ: RCA, 1957.

Rae, John B. The American Automobile. Chicago: University of Chicago Press, 1965.

Ramsey, Paul. Fabricated Man: The Ethics of Genetic Control. New Haven: Yale University Press, 1970.

Rapport, Samuel, and Wright, Helen, eds. Engineering. New York: New York University Press, 1963.

Ravetz, Jerome R. Scientific Knowledge and Its Social Problems. Oxford: Clarendon Press, 1971.

Reagan, Michael D. Science and the Federal Patron. New York: Oxford University Press, 1969.

Reddick, DeWitt Carter. Literary Style in Science Writing.

Redman, Eric. The Dance of Legislation. New York: Simon & Schuster, 1973.

Reich, Charles A. The Greening of America. New York: Random House, 1970.

Reich (2). The New Property.

Reinow, Robert, and Reinow, Leona Train. Moment in the Sun. New York: Ballantine Books, 1969.

Reitze, Arnold W. Environmental Law (plus supplement). Washington, DC: North American International, 1972.

Remarque, Erich M. All Quiet on the Western Front. New York: Fawcett World Library, 1969.

Reschler, Nicholas. Distributive Justice: A Constructive Critique of the Utilitarian Theory of Distribution. New York: Bobbs-Merrill Co., 1966.

Restivo, Sal P., and Vanderpool, Christopher, K., eds. Comparative Studies in Science and Society. Columbus, OH: Charles E. Merrill Publishing Co., 1974.

Reynolds, W.C. Energy: From Nature to Man. New York: McGraw-Hill, 1974.

Rhinelander, Philip H. Is Man Incomprehensible to Man? New York: Charles Scribner's Sons, 1974.

Richter, Maurice N., Jr. Science as a Cultural Process. Cambridge, MA: Schenkman Publishing Co., 1972.

Robbins, Harold. The Betsy. New York: Pocket Books, 1975.

Rochlin, G. Scientific American Anthology: Scientific Technology and Social Change. San Francisco: WH Freeman & Co., 1974.

Rocks, Lawrence, and Runyon, Richard P. The Energy Crisis. New York: Crown Publishers, 1972.

Roos, Leslie L., Jr., ed. The Politics of Ecosuicide. New York: Holt, Rinehart & Winston, 1971.

Rose, Hilary, and Rose, Steven. Science and Society. Middlesex: Penguin Books, 1969.

Rosenbaum, Walter A. The Politics of Environmental Concern. New York: Praeger Publishers, 1973.

Rosenberg, Nathan. Technology and American Economic Growth. New York: Harper & Row, 1972.

Rosenfeld, Albert. The Second Genesis; The Coming Control of Life. Englewood Cliffs, NJ: Prentice-Hall, 1969.

Rosenthal, Albert H., ed. Public Science Policy and Administration. Albuquerque: University of New Mexico Press, 1973.

Roszak, Theodore. Where the Wasteland Ends. New York: Doubleday & Co., 1972.

Rothman, Stanley, and Mosmann, Charles. Computers and Society. Chicago: Science Research Associates, 1972.

Roueche, Berton. Eleven Blue Men. Boston: Little, Brown & Co., 1953.

Rourke, Francis E., ed. Bureaucratic Power in National Politics: Introductory Readings in American Politics. Boston: Little, Brown & Co., 1972.

Rousseau, Jean-Jacques. Discourse Upon the Origin and Foundation of the Inequality Among Mankind. New York: Burt Franklin, 1761.

Ruse, Michael. Philosophy of Biology. New York: Humanities Press, 1973.

Ruskin, John. The Eagle's Nest. New York: John Wiley & Sons, 1883.

Russell, C.A. Science and Religious Belief: A Selection of Recent Historical Studies. London: University of London Press, 1973.

Saarinen, Thomas F. Perception of Environment. Washington, DC: Association of American Geographers, Commission on College Geography Resource Paper No. 5, 1969.

Sack, John, and Meadows, Judith L. Entering BASIC. Chicago: Science Research Associates, 1973.

Saint Simon, Henri de. Social Organization, the Science of Man, and Other Writings. New York: Harper & Row, 1964.

Salmon, Wesley C. Logic. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Salomon, Jean Jacques. Science and Politics. London: Macmillan, 1973.

Sampson, Anthony. The Seven Sisters: The Great Oil Companies and the World They Made. New York: Viking Press, 1975.

Sampson, Roy J., and Farris, Martin T. Domestic Transportation; Practice, Theory, and Policy. Boston: Houghton Mifflin Co., 1975.

Sanders, Donald H. Computers in Society. New York: McGraw-Hill, 1973.

Sapolsky, Harvey. *The Polaris System Development: Bureaucratic and Programmatic Success in Government*. Cambridge, MA: Harvard University Press, 1972.

Sarton, George. *History of Science I*. Cambridge, MA: Harvard University Press, 1959.

Sax, Joseph L. *Defending the Environment: A Strategy for Citizen Action*. New York: Alfred A. Knopf, 1971.

Sayles, Leonard A., and Chandler, Margaret K. *Managing Large Systems: Organizations for the Future*. New York: Harper & Row, 1971.

Schaeffer, Francis A. *Genesis in Space and Time*. Glendale, CA: Regal Books, 1972.

Schiller, Friedrich. *On the Aesthetic Education of Man, in a series of letters*. Oxford: Clarendon Press, 1967.

Schon, Donald A. *Beyond the Stable State*. New York: WW Norton & Co., 1973.

Schooler, Dean, Jr. *Science, Scientists, and Public Policy*. New York: Free Press, 1971.

Schroeer, Dietrich D. *Physics and Its Fifth Dimension: Society*. Reading, MA: Addison-Wesley Publishing Co., 1972.

Schultze, Charles L., et al. *Setting National Priorities: the 1973 Budget*. Washington, DC: The Brookings Institution, 1972.

Schumacher, Ernst F. *Small is Beautiful; economics as if people mattered*. New York: Harper & Row, 1973.

Schurr, Sam H., ed. *Energy, Economic Growth and the Environment*. Baltimore: Johns Hopkins University Press, 1972. Published for Resources for the Future.

Schwartz, A. Truman. *Chemistry: Imagination and Implication*. New York: Academic Press, 1973.

Schwitzgebel, Robert L., and Schwitzgebel, Ralph K. *Psychotechnology*. New York: Holt, Rinehart & Winston, 1972.

Science, vol. 184, no. 4134. Washington, DC: American Association for the Advancement of Science, April 19, 1974.

Scientific American. "Arms Control." Introduction by Herbert F. York. San Francisco: WH Freeman & Co., 1973a.

________. "Chemistry in the Environment." Introduction by Carole L. Hamilton. San Francisco: WH Freeman & Co., 1973b.

________. "Communication." San Francisco: WH Freeman & Co., September 1972.

________. "Energy and Power." San Francisco: WH Freeman & Co., September 1971.

________. "Lives in Science." New York: Simon & Schuster, 1957.

________. "Man and the Ecosphere." Compiled by Paul R. Ehrlich. San Francisco: WH Freeman & Co., 1971.

Seager, Spencer L., and Stoker, Stephen. *Chemistry, A Science for Today*. Glenview, IL: Scott Foresman & Co., 1973.

Segerberg, Osborn. *The Immortality Factor*. New York: EP Dutton & Co., 1974.

Seidman, Harold. *Politics, Position and Power: the dynamics of federal organization*. 2nd edition. New York: Oxford University Press, 1975.

Shapere, Dudley. *Galileo: A Philosophical Study*. Chicago: University of Chicago Press, 1974.

Sharpe, William F. *The Economics of Computers*. New York: Columbia University Press, 1969.

Shils, Edward. *Criteria for Scientific Development: Public Policy and National Goals*. Cambridge, MA: MIT Press, 1968.

Simpson, George G. *This View of Life: The World of an Evolutionist*. New York: Harcourt Brace Jovanovich, 1964.

Sims, J.H., and Baumann, D.D. *Human Behavior and the Environment: Interactions between Man and His Physical World*. Chicago: Maroufa Press, 1974.

Singer, Charles J. *A Short History of Scientific Ideas to 1900*. Oxford: Clarendon Press, 1959.

Singer, Milton. *When A Great Tradition Modernizes*. New York: Praeger Publishers, 1972.

Skinner, B.F. *Beyond Freedom and Dignity*. New York: Alfred A. Knopf, 1971.

________. *Walden Two*. New York: Macmillan, 1948.

Skinner, Brian J., and Turekian, Karl. *Man and the Ocean*. Englewood Cliffs, NJ: Prentice-Hall, 1973.

Skolnikoff, Eugene B. *The International Imperatives of Technology*. Berkeley: Institute of International Studies, 1972.

________. *Science, Technology and American Foreign Policy*. Cambridge, MA: MIT Press, 1967.

Slack, A.V. Defense Against Famine. Garden City, NY: Doubleday & Co., 1970.

Slater, Philip E. Earthwalk. New York: Bantam Books, 1975.

________. The Pursuit of Loneliness. Boston: Beacon Press, 1970.

Smelser, Neil J. Social Change in the Industrial Revolution. Chicago: University of Chicago Press, 1959.

Smith, Alan G.R. Science and Society in the 16th and 17th Centuries. New York: Harcourt Brace Jovanovich, 1973.

Smith, Grahame J.C., Steck, Henry, and Surette, Gerald. Our Ecological Crisis. New York: Macmillan, 1974.

Snow, C.P. Science and Government. Cambridge, MA: Harvard University Press, 1961.

________. The Two Cultures: And a Second Look. 2nd edition. Cambridge: Cambridge University Press, 1964.

Society of Friends. Who Shall Live. American Friends Service Committee. New York: Hill & Wang, 1970.

Solzhenitsyn, Aleksander I. The First Circle. New York: Harper & Row, 1968.

Sophocles. Oedipus Rex.

Southwick, Charles H. Ecology and the Quality of Our Environment. New York: Van Nostrand Reinhold Co., 1972.

Spicer, Edward Holland. Human Problems in Technological Change, a casebook. New York: Russell Sage Foundation, 1952.

Stadler, John, ed. Eco-Fiction. New York: Washington Square Press, 1971.

Stagner, Ross. Psychological Aspects of International Conflict. Belmont, CA: Brooks/Cole Publishing Co., 1967.

Stein, Maurice. The Eclipse of Community. Princeton: Princeton University Press, 1971.

Steinhart, Carol, and Steinhart, John. Energy: Sources, Use and Role in Human Affairs. Scituate, MA: Duxbury Press, 1974.

Stone, Christopher D. Should Trees Have Standing? Los Altos, CA: W. Kaufman, 1974.

Storer, John H. The Web of Life. New York: Devin-Adair Co., 1953.

Stratton Commission (U.S. Commission on Marine Science, Engineering, and Resources). Our Nation and the Sea. Washington, DC: USGPO, January 1969.

Strauss, David F. The Old Faith and the New.

Struik, Dirk J. Yankee Science in the Making. New York: Macmillan, 1962.

Study of Critical Environmental Problems (SCEP). Man's Impact on the Global Environment: assessment and recommendations for action; report. Williams College, 1970. Cambridge, MA: MIT Press, 1970.

Sudnow, David. Passing On. Englewood Cliffs, NJ: Prentice-Hall, 1967.

Susskind, Charles. Understanding Technology. Baltimore: Johns Hopkins University Press, 1973.

Szasz, Thomas S. Law, Liberty and Psychiatry. New York: Macmillan, 1968.

Tank, Ronald, ed. Focus on Environmental Geology. New York: Oxford University Press, 1973.

Tart, Charles T., ed. Altered States of Consciousness. New York: John Wiley & Sons, 1969.

Taviss, Irene. The Computer Impact. Englewood Cliffs, NJ: Prentice-Hall, 1970.

Taylor, Frank S. A Short History of Science and Scientific Thought. New York: WW Norton & Co., 1949.

Taylor, Gordon Rattray. The Biological Time Bomb. New York: New American Library-Signet, 1968.

Teague, Robert, and Erickson, Clint, eds. Computers and Society. St. Paul, MN: West Publishing Co., 1974.

Teich, Albert, ed. Technology and Man's Future. New York: St. Martin's Press, 1972.

Teng, Ssu-yii, and Fairbank, John K. China's Response to the West; a documentary survey, 1839-1923. Cambridge, MA: Harvard University Press, 1954.

Terborgh, George. The Automation Hysteria. New York: WW Norton & Co., 1966.

Theimer, O. A Gentleman's Guide to Modern Physics. Belmont, CA: Wadsworth Publishing Co., 1973.

Theobald, Robert. Futures Conditional. Indianapolis, IN: Bobbs-Merrill Co., 1972.

Theobald, Robert, and Scott, J.M. Teg's 1994, an anticipation of the near future. Chicago: Swallow Press, 1972.

Thompson, William. At the Edge of History. New York: Harper & Row, 1971.

Tierney, Brian, Kegan, Donald, and Williams, L. Pearce, eds. Ancient Science--Metaphysical or Observational. Philadelphia: Philadelphia Book Co., 1968.

Titmuss, Richard M. The Gift Relationship. New York: Pantheon Books, 1971.

Toffler, Alvin. Future Shock. New York: Random House, 1970.

Toffler, Alvin, ed. The Futurists. New York: Random House, 1972.

Toulmin, Stephen. Foresight and Understanding; an enquiry into the aims of science. Bloomington: Indiana University Press, 1961.

Toulmin, Stephen, and Goodfield, June. The Architecture of Matter. New York: Harper & Row, 1962.

_______________. The Fabric of the Heavens: the Development of Astronomy and Dynamics. New York: Harper & Row, 1965.

Tribe, Laurence H. Channeling Technology Through Law. Chicago: Bracton Press, 1973.

Troisfontaines, Roger. I Do Not Die. Paris: Editions universitaires, 1960.

Truitt, Willis H., and Solomons, T.W. Graham. Science, Technology and Freedom. Boston: Houghton Mifflin Co., 1974.

Tucker, Edwin W. Legal Regulation of the Environment: Text, Cases, Problems. St. Paul, MN: West Publishing Co., 1972.

Turk, Amos, Turk, Jonathan, Wittes, Janet, and Wittes, Robert. Ecology, Pollution, Environment. Philadelphia: WB Saunders Co., 1972.

_______________. Environmental Science. Philadelphia: WB Saunders Co., 1974.

Udall, Stewart. The Quiet Crisis. New York: Holt, Rinehart and Winston, 1963.

United Nations. Basic Problems of Disarmament.

United States Air Force (USAF). (1) Command and Control in Defense Management. (2) Quarter Century of Air Power. (3) The Technological Bases of Power. (4) Through the Eyes of Aviators. (5) U.S. Air Power Ascension to Prominence.

United States Arms Control and Disarmament Agency (USACDA). Arms Control and Disarmament Agreements. Washington, DC: USACDA, 1975.

United State Congress. House of Representatives. Committee on Merchant Marine and Fisheries. Subcommittee on Fisheries and Wildlife Conservation and the Environment. Growth and Its Implications for the Future. Hearings. 93rd Cong., 1st sess., May 1, 1973. Washington, DC: USGPO, 1973.

United States Council on Environmental Quality. Energy and the Environment: electric power. Washington, DC: USGPO, 1973.

________. Environmental Quality. First annual report with President's message to Congress, transmitted to Congress August 1970. Washington, DC: USGPO, 1970.

United States Department of Health, Education, and Welfare (DHEW). HEW Report of the Secretary's Commission on Medical Malpractice. Washington, DC: DHEW, 1973.

United States Library of Congress. Science Policy Research Division. Technical Information for Congress. Report to the United States Congress, House, Committee on Science and Astronautics, Subcommittee on Science, Research and Development. 92nd Cong., 1st sess. Revised. Washington, DC: USGPO, 1971.

Vance, Maurice M. "A Collection of Readings in the History of Science." Mimeographed.

Van Melsen, Andrew. Science and Technology. Pittsburgh: Duquesne University Press, 1961.

Van Tassel, David D., and Hall, Michael G., eds. Science and Society in the United States. Homewood, IL: Dasey Press, 1966.

Vaux, Kenneth. Biomedical Ethics. New York: Harper & Row, 1974.

Vesiland, P. Aarne. Environmental Pollution and Control. Ann Arbor: Ann Arbor Science Publishers, 1975.

Villee, Claude A. Biology. Philadelphia: WB Saunders Co., 1972.

Volpe, E. Peter. Human Heredity and Birth Defects. Indianapolis, IN: Pegasus, 1971.

________. Understanding Evolution. 2nd edition. Dubuque, IA: WC Brown & Co., 1970.

Von Daniken, Erich. Chariots of the Gods. New York: Bantam Books, 1971.

Vonnegut, Kurt. Player Piano. New York: Avon Books, 1971.

_______. Slaughterhouse Five. New York: Dell Publishing Co., 1974.

Von Weizsacker, Carl F. The History of Nature. Chicago: University of Chicago Press, 1949.

Wagner, Richard H. Environment and Man. New York: WW Norton & Co., 1971.

Wallace, Bruce. Essays in Social Biology. Vol. I: People, Their Needs, Environment, Ecology. Vol. II: Genetics, Evolution, Race, Radiation Biology. Vol. III: Disease, Sex, Communication, Behavior. Englewood Cliffs, NJ: Prentice-Hall, 1972.

Ward, Barbara, and Dubos, Rene. Only One Earth. New York: WW Norton & Co., 1972.

Warren, Roland L., ed. Perspective on the American Community; a book of readings. Chicago: Rand-McNally & Co., 1966.

Watson, James D. The Double Helix. New York: Atheneum Publishers, 1968.

Watt, Kenneth E. Ecology and Resource Management. New York: McGraw-Hill, 1967.

_______. Principles of Environmental Science. New York: McGraw-Hill, 1973.

Weber, Max. From Max Weber: Essays in Sociology. Edited by Hans H. Gerth and C. Wright Mills. New York: Oxford University Press, 1946.

Weinberg, Alvin M. Reflections on Big Science. Cambridge, MA: MIT Press, 1967.

Wells, H.G. A Modern Utopia. Lincoln: University of Nebraska Press, 1967.

Wenk, Edward, Jr. The Politics of the Ocean. Seattle: University of Washington Press, 1972.

Wertz, Richard W., ed. Readings on Ethical and Social Issues in Biomedicine. Englewood Cliffs, NJ: Prentice-Hall, 1973.

West, Felicia E. Science for Society: A Bibliography. 4th and 5th editions. Compiled for the Commission on Science Education, American Association for the Advancement of Science. Washington, DC: AAAS, 1973.

Westfall, R.S. The Construction of Modern Science. New York: John Wiley & Sons, 1971.

Westmoreland County Conservation District. *Directory of Environmental Information for Westmoreland County*.

Westoff, Leslie, and Westoff, Charles. *From Now to Zero: Fertility, Contraception and Abortion in America*. Boston: Little, Brown & Co., 1971.

White, Lynn, Jr. *Dynamo and Virgin Reconsidered*. Cambridge, MA: MIT Press, 1971.

_______. *Medieval Technology and Social Change*. New York: Oxford University Press, 1962.

Whitehead, Alfred N. *Adventures of Ideas*. New York: Macmillan, 1933.

_______. *Science and the Modern World*. Lowell lectures, 1925. New York: Macmillan, 1925.

Whyte, William H. *The Last Landscape*. New York: Doubleday & Co., 1968.

Wiener, Norbert. *The Human Use of Human Beings; Cybernetics and Society*. Boston: Houghton Mifflin Co., 1954.

Williams, Robert H., ed. *To Live and to Die*. New York: Springer-Verlag New York, 1973.

Williams, Roger J. *Nutrition Against Disease; environmental prevention*. New York: Pitman Publishing Corp., 1971.

Williams, Trevor I., and Kerry, Thomas D. *A Short History of Technology from the Earliest Times to A.D. 1900*. New York: Oxford University Press, 1961.

Wilson, E.O., et al. *Life on Earth*. Sunderland, MA: Sinauer Associates, 1973.

Wilson, Richard, and Jones, William J. *Energy, Ecology and the Environment*. New York: Academic Press, 1974.

Winchester, A.M. *Human Genetics*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.

Winfrey, Robley. *Economic Analysis for Highways*. Scranton, PA: International Textbook Co., 1969.

Winter, William O. *The Urban Polity*. New York: Dodd, Mead & Co., 1969.

Wiser, Charlotte V., and Wiser, William H. *Behind Mud Walls*. New York: RR Smith Co., 1930.

Wohlstetter, Roberta. Pearl Harbor: Warning and Decision. Stanford: Stanford University Press, 1962.

Wooldridge, Dean. The Machinery of the Brain. New York: McGraw-Hill, 1963.

________. Mechanical Man: The Physical Basis of Intelligent Life. New York: McGraw-Hill, 1968.

World Health Organization. Health Hazards of the Human Environment. Geneva: World Health Organization, 1972.

Worrell, A.C. Principles of Forest Policy. New York: McGraw-Hill, 1970.

Wright, Quincy. A Study of War. Chicago: University of Chicago Press, 1965.

Yoder, John H. The Politics of Jesus. Grand Rapids, MI: William B. Eerdmans Publishing Co., 1972.

York, Herbert E. Race to Oblivion. New York: Simon & Schuster, 1970.

Young, David P. A New World in the Morning--Biopsychological Revolution. Philadelphia: Westminster Press, 1972.

Young, Louise B., ed. Mystery of Matter. New York: Oxford University Press, 1965.

Zamiatin, Yevgeny. We. New York: Viking Press, 1972.

Ziman, John. Public Knowledge, the Social Dimension of Science. London: Cambridge University Press, 1968.

Zola, Emile. The Experimental Novel, and Other Essays. New York: The Cassell Publishing Co., 1894.

C. PROGRAM PROFILES

CALIFORNIA

0090-p01

FOUNDATIONS OF NATURAL SCIENCE (FNS)
California State College
School of Natural Sciences & Mathematics
100E. Victoria
Dominguez Hills, CA 90747

Dr. Danette Dobyns, Director
213/532-4300 ext. 484

HISTORY

1. FNS was established in 1965, at which time it was an interdepartmental field of concentration (i.e., a "major"). Since then it has been changed to a "minor."

2. Objective: to provide a coherent set of undergraduate courses for instruction on the nature of science.

DEGREES OFFERED

1. Undergraduate: B.S.*, B.A.*

   *a minor toward a B.S./B.A. degree; each degree also requires a major.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. FNS is under the jurisdiction of the School of Natural Sciences & Mathematics.

2. Relationship with traditional departments: most courses actually taught by regular departments.

3. Other groups involved in STS studies: Small College offers an area of concentration in STS.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 33%
   c. combination of a and b 67%

5. There is a multidisciplinary committee of faculty for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   physical sciences
   social sciences
   humanities

   --educational and/or career objectives: widely varied.

2. Faculty teaching program-sponsored courses.

--approximate % from:	physical sciences	67%
	social sciences	33%

   --appointment and promotion of faculty is by regular department.

0100-p01

DEGREE MINOR IN TECHNOLOGY & CHANGE

California State College, Stanislaus
800 Monte Vista Ave.
Turlock, CA 95380

Dr. John P Rasmussen, Director
209/634-4602

HISTORY

1. Program established in 1973 at the request of the college president.

2. Objectives: interest students in urgent contemporary issues; bridge the "two cultures."

DEGREES OFFERED

1. Undergraduate: minor.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: borrows certain interested faculty on temporary basis.

3. Other groups involved in STS studies: close cooperation with Urban Studies/Environmental Studies.

CURRICULUM

1. Priority given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 10%
   c. combination of a and b 90%

5. There is a multidisciplinary curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --10% graduates
   90% undergraduates

   --approximate % from:
   humanities 10%
   physical sciences 10%
   social sciences 80%

   --educational and/or career objectives: extremely varied.

0250-p01

CENTER FOR INTERDISCIPLINARY & INNOVATIVE SCIENCE (CIIS)

San Francisco State University
School of Natural Sciences
1600 Holloway Ave.
San Francisco, CA 94132

Dr. George Araki, Director
415/469-1210

HISTORY

1. CIIS was established in September 1974 to broaden the interdisciplinary endeavors of the School of Natural Sciences and to develop a means of innovative approaches to academic activities. It incorporates the former Department of Interdisciplinary Physical Sciences.

2. Objectives:

   a. develop, promote, and coordinate interdisciplinary courses, programs, and activities for the School of Natural Sciences.

   b. provide a vehicle for innovative activities and new modes of academic activity for faculty of the School of Natural Sciences.

   c. offer undergraduate and advanced degrees in interdisciplinary Science.

   d. provide curriculum serving specific interdisciplinary educational needs, such as teacher education.

   e. help coordinate interdisciplinary activities with other schools on campus and with units off campus.

DEGREES OFFERED

1. Undergraduate: B.A.

   Graduate: M.A.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. CIIS is under the jurisdiction of the School of Natural Sciences.

2. Relationship with traditional departments: CIIS is a vehicle through which all departments in the School of Natural Sciences can participate in interdisciplinary and innovative work. It also helps coordinate interdisciplinary activities with other schools and units on campus. CIIS "buys" faculty time from departments for participation in variable content courses.

   CIIS is not well-defined in terms of set courses which are taught year after year. Rather, it is a flexible program in which the content can vary from semester to semester. Therefore, CIIS can take advantage of faculty who are involved in supra-disciplinary work, either in terms of research or innovative teaching or both. With the help of faculty (mainly from the sciences), CIIS develops large, interdisciplinary themes.

3. Other groups involved in STS studies: CIIS cooperates with and supports Science & Humanities: A Program for Convergence.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	5%
b. systemic/synoptic/descriptive, etc. in approach	95%

5. There is an Advisory Committee composed of members of the School of Natural Science which plans and approves courses.

CONSTITUENCY

1. Students taking courses.

   -- 5% graduates
   95% undergraduates

   --approximate % from:

agriculture and life sciences	15%
humanities	55%
physical sciences	10%
social sciences	10%
other	10%

--educational and/or career objectives: B.A. in Liberal Arts.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	agriculture and life sciences	30%
	engineering	5%
	humanities	5%
	physical sciences	50%
	social sciences	10%

--appointment and promotion of faculty is by regular department.

0250-p02

SCIENCE & HUMANITIES: A PROGRAM FOR CONVERGENCE

San Francisco State University
1600 Holloway Ave.
San Francisco, CA 94132

Dr. Michael S. Gregory, Director
415/469-1301

HISTORY

1. In 1971, the dean of the School of Humanities called a conference of faculty and students from the 9 departments within the School to define new approaches to interdisciplinary cooperation. As a result of this conference, the Humanities Action Committee (HUMAC) was instituted. HUMAC subsequently sought, and was awarded, an NEH Planning Grant entitled "Major Figures & Their Impact." This grant provided for planning and offering interdisciplinary courses focused on Newton, Darwin, and Einstein and their particular impacts on humanities. Concurrently, a Science-Humanities Liaison Group was appointed by the respective deans. The Liaison Group, comprised of 10 members and student representatives, formulated the proposal for an NEH Development Grant, which was awarded in August 1975.

2. Objectives: the program calls for a 5-year investigation in the area of science-humanities convergence. The specific aim is to derive a curriculum that will illuminate the contemporary Two Cultures issue in historical perspective by: (1) investigating the cognitive foundations of western world view from the Mesopotamian and Greek traditions forward; (2) tracing the growing divergence of science and humanities marked particularly by the "New Philosophy" of the 17th century; (3) exploring the paradigmatic innovations of Copernicus, Newton, Darwin, and Einstein from the perspectives of history of ideas and philosophy of science; and (4) addressing key 20th century issues such as quantum theory, brain hemisphere differentiation, and problems of scientific description inherent in a series of conceptual models of animal and human behavior, together with the manifold humanistic implications of each of these scientific questions.

DEGREES OFFERED

1. Undergraduate: B.A. in Liberal Studies projected for 1976-77.

FUNDING

1. % of total budget from outside sources 56%
   % of total budget from institution 44%

2. % of outside funds from private foundations 30%
   % of outside funds from government agencies 70%

INSTITUTIONAL ARRANGEMENTS

1. The program is inter-school (School of Humanities & School of Natural Sciences).

2. Relationship with traditional departments: primary relationship is with schools, not departments. Participating faculty are drawn from departments for membership in the cross-school convergence program. FTE generated by program courses is divided equally between the School of Humanities and the School of Natural Sciences. When additional schools join the program, similar sharing arrangements will be made.

   Informal departmental representation is achieved via the fact that several program faculty are officers in their respective departments (e.g., the chairmen of the Departments of Biology and Classics, the vice-chairman of the Department of English are teaching participants in the program).

3. Other groups involved in STS studies: Center for Interdisciplinary & Innovative Science (CIIS). There is informal cooperation between the two programs. The coordinator of CIIS is a teaching member of the Convergence Program faculty. Several Convergence Program faculty teach CIIS courses.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by schools.

4. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 70%
   c. combination of a and b 30%

5. An Advisory Group, comprised of all program members, plans courses. Courses are approved by the Dean of Undergraduate Studies. Curricula are approved by the Educational Policies Committee and the Dean of Undergraduate Studies.

CONSTITUENCY

1. Students taking courses.

   --65% graduates
   35% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   humanities
   agriculture and life sciences
   physical sciences
   social sciences
   engineering
   business and public administration
   other

   --educational and/or career objectives: liberal education; enrichment of humanistic background; enrichment of scientific background.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

agriculture and life sciences	25%
humanities	50%
physical sciences	25%

   --appointment and promotion of faculty is by regular department.

0260-p01

FUTURES STUDIES AREA

San Jose State University
San Jose, CA 95192

Dr. David C Miller, Director
408/277-3409

HISTORY

1. In 1971, Dr. Ronald L Hunt and Dr. David C Miller received a small grant from the Regional US Office of Education to develop a graduate-level futures studies curriculum. Coincident with that effort, they taught an experimental course jointly in 1972. Since then, Dr. Hunt has taught a version of the course in the Instructional Technology Department, School of Education, while Dr. Miller has offered a version in the Cybernetic Systems Program.

2. Objectives:
   a. to identify and explore fundamental concepts of futures studies.
   b. to orient students to the historical development and status of the field.
   c. to acquaint students with futures literature.
   d. to help students identify, formulate, and begin to undertake a study of some specific futures studies topic.

DEGREES OFFERED

1. Graduate: M.A.*

   *degree is in Cybernetic Systems, not in futures studies. Each degree in the program is custom-fitted to the student, however, with half of the required credits taken outside the program core. Students can and have specialized in futures studies in the program.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the Cybernetic Systems Program, an autonomous program in the School of Social Science.

2. Relationship to traditional departments: no full-time, tenured faculty. Half the faculty are from any of several departments in the social, business, and engineering schools. Others are adjunct professors from the local professional community (including the director). No instructor teaches more than 2 courses.

CURRICULUM

1. Priority given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses sometimes jointly sponsored by departments. One seminar on systems tools is sponsored jointly with Stanford University.

4. Approximate percent of courses generally:

a. problem oriented	40%
b. systemic/synoptic/descriptive, etc. in approach	60%

5. In order to clarify the purposes and content of the program, a faculty-student task team has worked for 2 years and an ad hoc administration-faculty team considering reorganization and relocation of the program has been organized as of 11/75.

CONSTITUENCY

1. Students taking courses.

   --100% graduate

   --student distribution by field (listed in decreasing numerical order)*:

   engineering
   social sciences
   business and public administration

   *difficult to say; students with any undergraduate major are accepted, and mix varies from year to year.

   --educational and/or career objectives: to learn how to apply systems thinking in interdisciplinary teams, with a problem-solving emphasis.

2. Faculty teaching program-sponsored courses.
   --appointment and promotion of faculty is by program.

0260-p02

MASTER'S DEGREE PROGRAM IN CYBERNETIC SYSTEMS (CS)
San Jose State University
San Jose, CA 95192

Dr. Norman O Gunderson, Director
408/277-3409

HISTORY

1. CS was established in 1968.
2. Objectives: purpose is to provide insight into complex natural, technological, and societal systems and to provide skills for the planning, development, and management of such systems. This general purpose is expressed by the following 8 objectives:
   a. to provide an understanding of system concepts such as control, growth, and information common to physical, business, economic, political, social, biological, and behavioral cybernetic (feedback) systems.
   b. to provide an understanding of systems methodology by means of the study of humankind's efforts to identify, analyze, and create systems.
   c. to provide a common language for the understanding and communication of systems concepts.
   d. to provide methodologies, training, and experience in the analysis, synthesis, and design of complex systems.
   e. to provide training and experience working as a member of an interdisciplinary team on system problems.
   f. to provide insight into some of the important systems of today as they relate to people and their future.
   g. to provide a framework for the further understanding and development of a student's specialty due to academic or work experience, such as health care, land use, food production, energy, and educational systems.
   h. to qualify the student for using these skills and insights on the job in business, government, and industry.

DEGREES OFFERED

1. Graduate: M.S.
2. Possible development of undergraduate minor and/or major in CS.

FUNDING

1. % of total budget from outside sources 20%
   % of total budget from institution 80%

2. % of outside funds from private foundations 50%
   % of outside funds from government agencies 50%

INSTITUTIONAL ARRANGEMENTS

1. CS is under the jurisdiction of the School of Social Science.

2. Relationship with traditional departments: majority of faculty appointments are "borrowed" part-time from existing university departments. The remaining faculty are adjunct appointments with employment in the areas of government, research, and industrial institutions.

3. Other groups involved in STS studies: some course work within existing academic departments.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Approximate percent of courses generally:

   a. problem oriented 60%
   b. systemic/synoptic/descriptive, etc. in approach 10%
   c. combination of a and b 30%

4. An interdisciplinary team of faculty and students plan courses; decisions of this team are subject to the approval of the curriculum committee of the School of Social Science.

CONSTITUENCY

1. Students taking courses.

   --20% graduates
   80% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   engineering
   social sciences
   humanities

   --educational and/or career objectives: too varied to accurately describe. Seems the majority are going into more advanced planning and research positions within governmental and private institutions.

2. Faculty teaching program-sponsored courses.

--approximate % from:

business and public administration	20%
engineering	45%
humanities	10%
physical sciences	10%
social sciences	15%

--appointment and promotion of faculty is by regular department.

0270-p01

ARMS CONTROL & DISARMAMENT PROGRAM (ACD)
Stanford University
Building 160
Stanford, CA 94305

Dr. John Lewis, Director
415/497-4353

HISTORY

1. In 1970, faculty from various disciplines organized an interdisciplinary, introductory course in arms control. The development of the teaching program was aided by a grant from the Ford Foundation. A second quarter was later added, and the faculty began the drafting of a textbook. Professional training was then added to the program.

2. Objectives: general education in arms control and international security; professional training of graduate students interested in arms control, as well as post-doctoral training; development of a textbook and teaching aids in arms control; faculty research; assistance to other institutions in the development of arms control classes. The program also has a US-Japan Project on arms control and international security affairs.

DEGREES OFFERED

1. Degrees are given through traditional departments with specialization in arms control or post-doctoral training in arms control.

FUNDING

1. % of total budget from outside sources 90%
   % of total budget from institution 10%

2. % of outside funds from private foundations 98%
   % of outside funds from government agencies 2%

INSTITUTIONAL ARRANGEMENTS

1. ACD is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: courses are for political science and history credit. However, the faculty is interdepartmental, with 18 faculty members. Included are faculty from Departments of Political Science, History, Genetics, Engineering/Economic Systems, Business School, Law School, and Stanford Linear Accelerator Laboratory.

3. Other groups involved in STS studies: Program in Human Biology, Program in Information Technology & Telecommunications, Program in Values, Technology, & Society; ACD is developing relationship with these programs, especially in the area of energy and nuclear proliferation.

CURRICULUM

1. Priority given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a.	problem oriented	25%
b.	systemic/synoptic/descriptive, etc. in approach	0%
c.	combination of a and b	75%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

-- 5% graduates
95% undergraduates

--approximate % from:	agriculture and life sciences	1%
	business and public administration	1%
	engineering	3%
	humanities	10%
	physical sciences	5%
	social sciences	80%

--educational and/or career objectives: extremely varied. Majority aim at graduate programs in the social sciences or law school.

2. Faculty teaching program-sponsored courses.

--approximate % from:	agriculture and life sciences	6%
	business and public administration	6%
	engineering	6%
	law	6%
	physical sciences	12%
	social sciences	64%

--appointment and promotion of faculty is by regular department.

0270-p02

ENGINEERING-ECONOMIC SYSTEMS (EES)

Stanford University
Stanford, CA 94305

Dr. William K Linvill, Chairman

HISTORY

1. Objective: prepare individuals for careers dealing with the phenomena characteristic of planning, operation, and control of large-scale technological-economic systems through programs of study, internship, and research on the graduate level.

DEGREES OFFERED

1. Graduate: M.S., Ph.D., Engineer; Ph.D. minor.
2. Plans for a terminal M.S. program with less mathematical emphasis for training people for non-academic professional careers as follow-up to Stanford undergraduate majors in Human Biology; Values, Technology, and Society; and Economics.

FUNDING

1. Funds have been received from both private foundations and government agencies.

INSTITUTIONAL ARRANGEMENTS

1. EES has departmental status and is within the School of Engineering.
2. Relationship with traditional departments: some interaction, especially in research, with the School of Law.

CURRICULUM

1. Priority given to teaching and research.

0270-p03

PROGRAM IN HUMAN BIOLOGY (HuB)

Stanford University
Stanford, CA 94305

Dr. Donald Kennedy, Director
415/479-3693

HISTORY

1. HuB was initiated in 1969 by a grant from the Ford Foundation under the direction of 8 senior faculty members.
2. Objectives: to create human biologists--individuals who are knowledgeable about man, his function, behavior, and social patterns. Response to need for knowledge of the complex relationship of man with nature, exemplified by the dilemmas of social policy in health and education, population problems, pollution of the environment, and conservation and development of resources.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1. The grant from the Ford Foundation has expired and has not been renewed. Support is now mainly from general university funds. HuB received several smaller grants for specific, innovative courses.

INSTITUTIONAL ARRANGEMENTS

1. HuB is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: faculty are based in the department of their own discipline. HuB utilizes courses in pertinent areas of instruction available through university.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses jointly sponsored by departments. Seven of the upper division courses are cosponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	50%
c. combination of a and b	25%

5. There is a "Core" Committee for planning and coordination of introductory series of courses. An "Upper Division" Committee initiates and reviews upper division courses (numbered over 100).

CONSTITUENCY

1. Students taking courses.

   -- 2% graduates
   98% undergraduates

   --educational and/or career objectives: objectives are shown in student's choice of area of concentration within program and appropriate selection of courses. Approximately 80% plan on graduate study--law, medicine, public health, nursing, teaching, graduate school in humanities and science.

2. Faculty teaching program-sponsored courses.

   --faculty distribution by field (listed in decreasing numerical order):

   agriculture and life sciences
   social sciences
   business and public administration

   --appointment and promotion of faculty is by regular department.

0270-p04

PROGRAM IN INFORMATION TECHNOLOGY & TELECOMMUNICATIONS

Stanford University
Center for Interdisciplinary Research
Stanford, CA 94305

Dr. Donald A Dunn, Director
415/497-3930

HISTORY

1. The program was started in 1972 by a group of faculty doing research and teaching in this field who wished to have an organizational unit that would facilitate interdepartmental and interschool cooperation in research.

2. Objectives:

   a. to foster development of new bodies of knowledge relevant to information technology and telecommunications.

   b. to foster studies bearing on resolution of policy issues concerned with information technology and telecommunications.

   c. to foster studies developing application of information technology and telecommunications to education, particularly at university level.

   d. to provide identification inside and outside Stanford University for a continuing program of research in information technology and telecommunications.

   e. to provide locus of coordination for courses bearing on information technology and telecommunications.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 99%*
   % of total budget from institution 1%
   *this funding is for interdisciplinary research, not for operation of program administration, which is a very small cost.

2. % of outside funds from private foundations 5%
   % of outside funds from government agencies 95%

INSTITUTIONAL ARRANGEMENTS

1. The program is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: departments and schools can become affiliates of the program, thus granting them representation on the Program Executive Committee.

CURRICULUM

1. Priority is given to research. Teaching is managed through departments. The program merely lists courses in its brochure that are deemed relevant.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Approximate percent of courses generally:

a. problem oriented	10%
b. systemic/synoptic/descriptive, etc. in approach	80%
c. combination of a and b	10%

4. The Program Executive Committee must approve by majority vote: (a) the listing of courses deemed relevant to the subject matter of the program and (b) the endorsement of research proposals.

CONSTITUENCY

1. Students taking courses.

--90% graduates
10% undergraduates

--student distribution by field (listed in decreasing numerical order):

engineering
social sciences
business and public administration
law
physical sciences
humanities
agriculture and life sciences

--educational and/or career objectives: professional careers mostly. A significant number go into telecommunications policy analysis or administration.

2. Faculty teaching program-sponsored courses.

--appointment and promotion of faculty is by regular department.

0270-p05

PROGRAM IN VALUES, TECHNOLOGY, & SOCIETY (VTS)
Stanford University
Stanford, CA 94305

Dr. Edwin M. Good, Chairman
Dr. Robert E. McGinn, Coordinator
415/497-2565

HISTORY

1. VTS was established in 1971.

2. Objectives:

   a. provide students with materials and opportunities for synthesis, enabling them to realize more adequately the central goal of education: broad understanding of man, society, and nature, including their interactions in the contemporary world.

   b. develop program of courses providing basis for an innovative form of broad undergraduate education particularly appropriate for students planning study in graduate professional schools or in fields leading to careers in sociotechnical assessment, urban policy science, engineering-economic systems, public policy analysis, environmental planning, etc.

DEGREES OFFERED

1. Undergraduate: student can design Interschool Major in VTS. Minor in VTS is available.

2. Possible VTS major by 1979-80. Present discussions about an honors program in VTS to accompany a standard undergraduate major, and about a co-terminal B.A./B.S. in VTS and M.S. in Engineering-Economic Systems.

FUNDING

1. % of total budget from outside sources 37%
   % of total budget from institution 63%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. VTS is intercollegiate.

2. Relationship with traditional departments: faculty drawn from Schools of Engineering, Humanities and Sciences, Earth Sciences, and, in the past, Medicine. VTS budget buys teaching time from schools and departments, unless the school or department is willing to contribute it.

3. Other groups involved in STS studies: there is friendly cooperation between VTS and Human Biology.

CURRICULUM

1. Priority is given to teaching. Research is an element in program expectations, but for the present is a lower priority than teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and occasionally utilizing non-interacting guest lecturers. In the past, and probably in the future, have utilized the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments in a few instances.

4. A 6-person faculty Administrative Committee plans and approves all courses. An Evaluation Team provides in-depth reviews of courses, as requested by the VTS Administrative Committee.

CONSTITUENCY

1. Students taking courses.

   --10% graduates
   90% undergraduates

   --approximate % from:

agriculture and life sciences	.5%
arts and sciences	46%
business and public administration	.5%
earth sciences	2%
engineering	20%
undeclared	31%

   --educational and/or career objectives: so varied as not to be simply described. The largest number probably do not know; a good many engineers, some prospective lawyers, physicians, some intending Ph.D.'s and teaching careers.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

engineering	40%
humanities	27%
law	7%
physical sciences	13%
social sciences	13%

   --appointment and promotion of faculty is by regular department.

0280-p01

OFFICE FOR HISTORY OF SCIENCE & TECHNOLOGY (OHST)
University of California, Berkeley
Berkeley, CA 94720

Dr. John L. Heilbron, Director
415/642-4581

HISTORY

1. OHST was initiated in 1973.
2. Objectives:
   a. coordinate activities in research and instruction in the history of science and technology at UC, Berkeley.
   b. promote the use of the rich historical material on science and technology in the university's libraries.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. Outside funding is received in the form of research grants.

INSTITUTIONAL ARRANGEMENTS

1. OHST is under the jurisdiction of a school or college within the university.
2. Relationship with traditional departments: faculty who use OHST come from several departments, particularly history. The office has no faculty positions of its own.

CURRICULUM

1. Priority is given to research.

0280-p02

ENERGY & RESOURCES PROGRAM
University of California, Berkeley
Room 112, Building T-5
Berkeley, CA 94720

Dr. Allan J Lichtenberg, Chairman
415/642-4057
Dr. John P Holdren, Graduate Advisor
415/642-1139

HISTORY

1. In 1972, the Vice Chancellor formed the Energy & Resources Committee to explore and foster opportunities for interdisciplinary teaching, research, and public service in the energy field, and to improve communication among departmental efforts in energy. The principal outgrowth of the early deliberations of the committee was the creation in July 1973 of the Energy & Resources Program. In December 1974, the Energy & Resources Group, a graduate degree program, was formed.
2. Objectives: the program supports interdisciplinary teaching, research, and information services focusing on the interactions of the technological, environmental, economic, social, and political aspects of energy and the resources associated with energy.

DEGREES OFFERED

1. Graduate: M.S., M.A., Ph.D.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is autonomous/independent/intercollegiate.
2. Relationship with traditional departments: faculty come from many different departments.

CURRICULUM

1. Priority given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	30%
b. systemic/synoptic/descriptive, etc. in approach	30%
c. combination of a and b	40%

CONSTITUENCY

1. Students taking courses.

--100% graduates in the degree programs, although there is much undergraduate teaching of students drawn from many departments.

--approximate % from:

agriculture and life sciences	20%
business and public administration	10%
engineering	20%
humanities	10%
law	10%
physical sciences	20%
social sciences	10%

--educational and/or career objectives: develop understanding of interaction of diverse components of energy problem and application of this understanding to policy formation through positions in government and industry.

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering	40%
Energy & Resources Group	60%

--appointment and promotion of faculty is by program and regular department. One faculty member is attached to the program full time.

0340-p01

MEDICINE & SOCIETY FORUM (MSF)
University of California, Los Angeles, School of Medicine
10833 Le Conte
Los Angeles, CA 90024

Dr. Bernard Towers, Director
Telephone #: 213/825-6253

HISTORY

1. MSF was started in January 1974 with the aid of a grant from the Institute on Human Values in Medicine.

2. Objectives: sponsors discussions on topics having to do with ethical, legal, or other societal implications of modern medical practices. Records these discussions on videotapes, which are available for private or classroom study and for purchase.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 20%
   % of total budget from institution 80%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. MSF is under the jurisdiction of the School of Medicine.

2. Relationship with traditional departments: cordial.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:
   a. problem oriented 100%
   b. systemic/synoptic/descriptive, etc. in approach 0%

CONSTITUENCY

1. Students taking courses.

   --80% graduates
   10% undergraduates
   10% general public

   --approximate % from:

health professions	70%
humanities	10%
law	10%
general public	10%

   --educational and/or career objectives: mostly allied health professions, medicine, law.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

health professions	70%
humanities	10%
law	10%
social sciences	10%

   --appointment and promotion of faculty is by regular department.

0360-p01

THE ENERGY CENTER
University of California, San Diego
La Jolla, CA 92037

Dr. SS Penner, Director
714/453-2000 ext. 1338

HISTORY

1. The center was established as an Organized Research Unit on the UC, San Diego campus during June 1974.

2. Objectives: strengthen interdisciplinary programs of research and teaching; provide graduate and post-doctoral students with added research opportunities, facilities, and assistance; solve fundamental problems deriving from the interrelated physical, biological, economic, political, and social consequences of man's need for energy.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The center is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: associates of the center are based within regular departments. The center has developed courses which are offered by regular departments.

CURRICULUM

1. Priority is given to research.

0360-p02

PROGRAM IN SCIENCE, TECHNOLOGY & PUBLIC AFFAIRS (STPA)
University of California, San Diego
Room 1516 H/L Building (B-006)
La Jolla, CA 92037

Dr. Herbert F. York, Director
714/452-3357

HISTORY

1. Program was started in 1973 due to Dr. York's interest in the subject.

2. Objectives:

   a. to provide an undergraduate minor of interest particularly to students in political science and history (who ought to understand more about science and technology impact on the world) and to students of science and engineering (who ought to understand more about how what they do affects the rest of us).

   b. to provide an organizational base for a modest research program in the field.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.

% of total budget from outside sources	40%
% of total budget from institution	60%

2.

% of outside funds from private foundations	50%
% of outside funds from government agencies	50%

INSTITUTIONAL ARRANGEMENTS

1. STPA is autonomous.

2. Relationship with traditional departments: administered as part of Physics Department and coordinated with Political Science Department; however, it is academically autonomous.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter usually taught by single faculty member and occasionally utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   -- 2% graduates
   98% undergraduates

   --approximate % from:

agriculture and life sciences	30%
engineering	10%
humanities	25%
physical sciences	10%
social sciences	25%

--educational and/or career objectives: various.

2. Faculty teaching program-sponsored courses.

--faculty are from the following fields:

agriculture and life sciences
humanities
physical sciences
social sciences

--appointment and promotion of faculty is by regular department.

0370-p01

JOINT PROGRAM IN BIOETHICS (JPB)
University of California Medical Center (UCSF)
Pacific School of Religion (Berkeley)
Health Policy Program (HPP)--UCSF
1326 Third Ave.
San Francisco, CA 94143

Dr. Albert R Jonsen, Director, UCSF
Dr. Karen Lebacqz, Director, PSR
415/666-1836

HISTORY

1. HPP began in July 1972 as an interdisciplinary group formed to establish a base for research and teaching and public service at UC, San Francisco. The group received a grant for core support from the Robert Wood Johnson Foundation, and later from the Kaiser Foundation. JPB was established with the Pacific School of Religion about 1-1/2 years later.

2. Objectives: JPB was established to increase interdisciplinary exchange among faculty and students through research, courses, and fellowships focused on ethical issues in contemporary health care. It is part of the HPP, which serves as an interdisciplinary resource group for health policy decision makers, provides courses for professional students, and promotes the exchange of information and ideas among a broad range of health professionals, lawyers, economists, sociologists, and ethicists.

DEGREES OFFERED

1. Graduate: M.A., Ph.D. These degrees are offered through the Pacific School of Religion in Berkeley. They are degrees in Religion and Society with emphasis on bioethics.

2. Plans are under consideration for a graduate degree program in bioethics at UC, San Francisco. Projected start-up date: 9/77.

FUNDING

1.

% of total budget from outside sources	80%
% of total budget from institution	20%

2.

% of outside funds from private foundations	50%
% of outside funds from government agencies	50%

INSTITUTIONAL ARRANGEMENTS

1. JPB is under the jurisdiction of HPP.

2. Relationship with traditional departments: cosponsors courses with departments. Students and faculty come from several departments and schools. Faculty hold appointments in various departments and schools.

3. Other groups involved in STS studies: Robert Wood Johnson Clinical Scholars Program (post-M.D., fellowship focus on Health Policy). JPB does joint projects with this program, advising scholars and participating in their seminars.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	75%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	25%

5. New courses are planned by faculty members in the program. All new courses must pass a curriculum committee of the academic senate.

CONSTITUENCY

1. Students taking courses.

--100% graduates (includes professional)

--approximate % from:

health sciences	85%
humanities/theology	15%

--educational and/or career objectives: varied. Physicians, nurses, pharmacists, dentists, theologians, and ministerial candidates; some plan teaching careers; most plan to practice a health profession. Some plan to be active in health policy formation.

2. Faculty teaching program-sponsored courses.

--approximate % from:

health sciences	55%
humanities/theology	20%
law	20%
social sciences	5%

--appointment and promotion of faculty is by regular department.

0400-p01

CALLISON COLLEGE INTERDISCIPLINARY STUDIES

University of the Pacific
Stockton, CA 95211

Dr. Otis H Shao, Provost
209/946-2441

HISTORY

1. In the fall of 1970, with the appointment of Professors Steve Anderson and Cortlandt Smith, courses were developed to introduce liberal arts students to issues involved in the relationship of man to the environment and prospects for the future. The college's commitment to cross-cultural and international studies defines man and environment in universal terms.

2. Objective of the course is to utilize interdisciplinary teaching to examine the relationships between science, technology, and society.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of a college within the university.

2. Relationship with traditional departments: other than cross-listing, there is no formal relationship.

3. Other groups involved in STS studies: College of the Pacific Multidisciplinary Program (I&I) and Pacific Center for the Study of Social Issues (PCSSI). Informal cooperation between I&I and Callison College.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	25%
c. combination of a and b	25%

4. The college has a curriculum committee to review all proposed courses. Planning of courses and programs is a new function which the committee is beginning to exercise.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

humanities	30%
international studies	35%
social sciences	35%

--educational and/or career objectives: extremely varied; no pattern is evident. Slightly more than 1 of every 2 graduates moves on to graduate schools in wide range of fields. Others move into variety of professions. No move of students to specialize in this area.

2. Faculty teaching program-sponsored courses.

--approximate % from:

physical sciences	50%
social sciences	50%

--appointment and promotion of faculty is by the college.

0410-p01

CENTER FOR FUTURES RESEARCH (CFR)
University of Southern California
University Park
Los Angeles, CA 90007

Dr. Burt Nanus, Director
213/746-5229

HISTORY

1. CFR was started in 1971 as a research program in the Graduate School of Business Administration.

2. Objectives: devoted to research in the fundamental directions and causes of social change. Involved in the design of strategies to deal with them. Activities include technology assessment, socio-economic forecasting, etc.

DEGREES OFFERED
1. No degrees offered.

FUNDING
1. % of total budget from outside sources 100%
% of total budget from institution 0%

2. % of outside funds from private foundations 33%
% of outside funds from government agencies 33%
% of outside funds from business 33%

INSTITUTIONAL ARRANGEMENTS
1. CFR is under the jurisdiction of the Graduate School of Business Administration.

2. Relationship with traditional departments: CFR is the research component within the Business School.

CURRICULUM
1. Priority is given to research.

0410-p02

CENTER FOR INTERDISCIPLINARY HUMANISTIC STUDIES (CIHS)
University of Southern California
College of Letters, Arts & Sciences
University Park
Los Angeles, CA 90007

Dr. David Malone, Director Pro tem
213/746-5294

HISTORY
1. In 1973-74, during discussions concerning new possible interdisciplinary curricula programs, members of the Humanities Faculty decided to recommend the establishment of a Center for Interdisciplinary Humanistic Studies as an administrative mechanism for relating and facilitating research, instructional, and service programs of the traditional humanistic disciplines to the programs of other disciplines and of the professional schools. Concern for the interaction of science and technology with society was only one of many concerns that would define the purposes of such a center. During the 1974-75 academic year, a search committee sought out and recommended the appointment of an academic staff for the center, which came into being in the fall of 1975.

2. Objectives: specific objectives remain undefined. Within the broad, generalized, and admittedly vague charge to CIHS, the academic staff will define, and is already defining, the specific objectives on the basis of specific research, instructional, and other programs which it is developing in cooperation with other academic disciplines and, most particularly, with the professional schools and other interdisciplinary centers. In a larger sense,

the objectives of CIHS are to relate research, instruction, and public programs in the humanities to a wide variety of general and specific problems and concerns of society, as reflected primarily in other disciplines and the programs of the professional schools.

DEGREES OFFERED

1. Since CIHS came into existence a very short time ago, no degree programs have as yet been planned. It is assumed that degree programs will be the natural consequence of significant research activity, and for that reason primary emphasis is currently placed on the identification of appropriate research projects. It is hoped that CIHS will develop degree programs that will offer alternative career opportunities to majors in the humanities.

FUNDING

1. No outside funding as yet.

INSTITUTIONAL ARRANGEMENTS

1. CIHS functions within the Humanities Division of the College of Letters, Arts & Sciences, reporting to the Dean of Humanities.

2. Relationship with traditional departments: an Advisory Board made up of Humanities Division chairmen and representatives from appropriate other disciplines and the professional schools helps to develop and ratify broad policy decisions. The academic staff of the center have faculty appointments in Humanities Division departments, but their primary responsibilities lie in developing and administering interdisciplinary programs. The formal relationship is through the individual programs that members of CIHS staff work out with departments or collections of departments.

3. Other groups involved in STS studies: the Social Science Research Institute (SSRI) at U of Southern California, as well as a few research projects around the campus, are examining the impact of science and technology on society. A priority of SSRI is to relate disaster predictions to social policy planning. CIHS is discussing possible joint programs that would involve the Humanities in the work of other academic components in the study of the impact of science and technology on society.

CURRICULUM

1. Priority is given to teaching and research.

2. Courses have been developed which will present interdisciplinary subject matter utilizing the following teaching methods: by a single faculty member; the team teaching method with faculty from several disciplines; and with non-interacting guest lecturers.

3. All courses must be approved by the University Curriculum Committee. There is currently an Undergraduate Curriculum Committee concerned with planning and developing a variety of curricular options within which faculty members may offer interdisciplinary courses. Under an NEH Curriculum Development grant, a variety of interdisciplinary courses are being prepared and taught.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates (at present)

--approximate % from:

business and public administration	30%
engineering	10%
humanities	15%
social sciences	20%
undeclared	25%

--educational and/or career objectives: most of students are pre-professional, with the highest percentage aspiring to a career in one of the health sciences. And not incidentally, one of the most active areas of interdisciplinary course development is in the field of biomedical ethics.

0410-p03

SOCIO-ENGINEERING CURRICULUM (SE)
University of Southern California
School of Engineering
Los Angeles, CA 90007

Dr. ZA Kaprielian, Director
213/746-2471

HISTORY

1. SE started in 1971 with the introduction of several courses specifically designed to increase the social, political, and economic awareness of undergraduate engineering students.

2. Objective: to provide engineering students with a more concentrated exposure to the social sciences and a more efficient exposure than is provided by the usual electives designed for the general student.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 50%
% of total budget from institution 50%

2. % of outside funds from private foundations 100%
% of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. SE is under the jurisdiction of the School of Engineering.

2. Relationship with traditional departments: In general, the courses are outlined and taught by members of the traditional departments in consultation with engineering faculty.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by a single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate proportion of courses generally:

a. problem oriented	1/3
b. systemic/synoptic/descriptive, etc. in approach	1/3
c. combination of a and b	1/3

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   engineering
   social sciences
   business and public administration

   --educational and/or career objectives: industrial work as engineers.

2. Faculty teaching program-sponsored courses.

--approximate % from:	business and public administration	25%
	engineering	25%
	social sciences	50%

   --appointment and promotion of faculty is by regular department.

COLORADO

0450-p01

MASTER OF SCIENCE DEGREE PROGRAM IN TELECOMMUNICATIONS
University of Colorado
EC OT 2-32
Boulder, CO 80309

Dr. Leonard Lewin, Coordinator
303/492-6424; -7327

HISTORY

1. The program started as a portion of a desire to find a successful interface between electrical engineering and the social sciences and review the apparent needs of the telecommunications industry.

These needs were looked at in some detail by surveying the industry and government, and the program took about 2 years to process through the university and to obtain start-up grant support from the NSF.

2. Objectives: to bridge the interface between electrical engineering, political science, journalism, and finance with respect to the telecommunications industry. The program seems to be working best as an executive development program for people already involved in the telecommunications industry. It appears to be somewhat successful as an entry level program to the job market in this fraction of the communications industry. The object of the program was to train people to be effective in the area of setting communications policy both at the regulatory level and the implementation level such as is found in communications groups, industry, the telephone company, and local, city, and state governments.

DEGREES OFFERED

1. Graduate: M.S. (since 1972)

FUNDING

1. The Graduate School contributes less than $10,000; the remaining funds come from the departments involved, and industry contributes a few thousand dollars.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the Graduate School.

2. Relationship with traditional departments: draws upon traditional departments for faculty and staff of the program and they are financed by them. The direct support from the Graduate School amounts to a part-time secretary and some supplies.

3. Other groups involved in STS studies: there are no formal programs; however, there are a variety of courses in this area taught in a wide variety of departments, including electrical engineering, aerospace engineering, and political science.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	50%

5. The controlling committee for the program is made up of the faculty members who have been teaching in it regularly, and this group meets as a whole for major decisions. Operating details are carried out by the director and the secretary.

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --student distribution by field (listed in decreasing numerical order):

   business and public administration
   social sciences
   humanities
   agriculture and life sciences
   engineering

   --educational and/or career objectives: approximately 50% of the students have been in the military and the signal corps. These officers are looking for career development in the telecommunications field and executive training. The remaining students cover a great variety of interests and job occupations that range from the FOC through industrial communications organizations to the telephone company and cable television. Additionally, there has been an interesting component of overseas students who are participating in various aspects of the organization of the telecommunications programs of their countries. Included are Saudi Arabia and Ghana.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

business and public administration	20%
engineering	40%
social sciences	20%
other	20%

   --appointment and promotion of faculty is by regular department.

0470-p01

TECHNOLOGY, MODERNIZATION & INTERNATIONAL STUDIES (TMIS)

University of Denver
Graduate School of International Studies
Denver, CO 80210

Dr. Joseph S Szyliowicz, Director
303/753-2992

HISTORY

1. A core group of faculty stimulated by student interest and their own intellectual concern with this topic undertook to devise a training and research program. A faculty seminar was initiated in 1972 and outside support was obtained in 1973 that permitted the establishment of the formal program.

2. Objective: provide basic understanding of technology in an international context. Students acquire necessary analytical and methodological skills to deal with technology-related problems in an international context while gaining strong disciplinary foundation in relevant area of study.

DEGREES OFFERED

1. Graduate: M.A., Ph.D.

FUNDING

1.

% of total budget from outside sources	65%
% of total budget from institution	35%

2.

% of outside funds from private foundations	65%
% of outside funds from government agencies	35%

INSTITUTIONAL ARRANGEMENTS

1. TMIS is under the jurisdiction of the Graduate School of International Studies.

2. Relationship with traditional departments: TMIS has developed a series of core courses which are offered in various departments of the university, including the Colleges of Business Administration, Arts & Sciences, and the Graduate School of International Studies. TMIS has a core of 4 teaching faculty members representing the Graduate School of International Studies, the Denver Research Institute, and the Department of Mathematics. Students are encouraged to develop innovative curriculum packages from a broad range of university offerings that will best enhance attainment of career objectives.

3. Other groups involved in STS studies: the Denver Research Institute conducts research on various aspects of this area under contracts from NSF, USAID, and NASA. TMIS draws heavily upon their physical and human resources.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	25%
c. combination of a and b	50%

5. The core faculty serves as a curriculum committee for planning new courses. Students are expected to take the core courses, but there are no limitations (apart from approval by the student's 3-person advisory faculty committee) on the content of the other 2/3 of the curriculum package.

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --approximate % from:

business and public administration	10%
engineering	5%
physical sciences	5%
social sciences	80%

   --educational and/or career objectives: students going for a Ph.D. are seeking teaching and/or research positions. At the M.A. level they are preparing themselves for positions in government, private industry, international organizations, and consulting and research firms.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

business and public administration	20%
physical sciences	40%
social sciences	40%

   --appointment and promotion of faculty is by regular department.

CONNECTICUT

0540-p01

COLLEGE OF SCIENCE IN SOCIETY (CSIS)
Wesleyan University
Middletown, CT 06457

Dr. Earl D Hanson, Chairman
203/347-9411 ext. 348

HISTORY

1. CSIS was approved by action of the Wesleyan faculty in November 1974 and by the Board of Trustees in January 1975 following about 2-1/2 years of planning and a supporting grant from NSF for $371,400 for a 3-year period. First students admitted in September 1975.

2. Objective: through a 3-year program, involving certain special courses and completion of a substantial thesis, undergraduate students will systematically examine the interaction of scientific knowledge and human affairs so as to enable themselves to deal with these issues in a rigorous yet flexible cross-disciplinary manner.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1. % of total budget from outside sources 100%
   % of total budget from institution 0%

2. % of outside funds from private foundations 1%
   % of outside funds from government agencies 99%

INSTITUTIONAL ARRANGEMENTS

1. CSIS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: CSIS is, in effect, another department. Many of the faculty have joint appointments in CSIS and another department.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

   a. problem oriented 40%
   b. systemic/synoptic/descriptive, etc. in approach 60%

5. The staff of CSIS serves as a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --approximate % from:

humanities	33%
natural sciences	34%
social sciences	33%

   --educational and/or career objectives: law, medicine, architecture (urban planning), etc. (as far as can be determined at this early date).

2. Faculty teaching program-sponsored courses.

   --approximate % from:

anthropology	17%
biology	33%
humanities	17%
social sciences	33%

   --appointment and promotion of faculty is by program and regular department.

0560-p01

HISTORY OF SCIENCE & MEDICINE (HSM)
Yale University
Box 2036 Yale Station
New Haven, CT 06520

Dr. Asger H Aaboe, Director of Graduate Studies
203/436-4366

HISTORY

1. HSM started as the Department of History of Medicine by Dr. John Fulton in 1950; enlarged to present form in 1960.

2. Objective: graduate and professional training of historians of science and medicine, subsidiary training in sociology and politics of science, history of technology, etc. Some undergraduate instruction offered by all faculty but not in any undergraduate major program.

DEGREES OFFERED

1. Undergraduate: no major, but several special students each year who concentrate in some part of the field.

   Graduate: M.A., Ph.D., M.D.-Ph.D.

2. An undergraduate major program is accepted by Yale faculty but shelved pending restitution of the junior faculty slots.

FUNDING

1. Individual faculty research funds and some graduate student support are the only forms of outside funding received.

INSTITUTIONAL ARRANGEMENTS

1. HSM is an autonomous department.

2. Relationship with traditional departments: some cross-listing of faculty members who also teach courses in other departments, e.g., mathematics, physics, and by some members of other departments who also teach for HSM, e.g., in sociology; also, cooperative teaching in such programs as medieval studies, etc. Graduate and undergraduate students have no departmental boundaries at Yale.

3. Other groups involved in STS studies: Law School, Institute for Social & Policy Studies, Economic Growth Center, and several departments such as Physics, Biology, Applied Science, etc. There is cooperation between these groups and HSM from time to time.

CURRICULUM

1. Priority is given to teaching and research.

2. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	100%

3. A departmental committee plans and approves courses.

CONSTITUENCY

1. Students taking courses.

   --about 12 graduate students at present
   2-200 undergraduates in each of about 4 courses each semester

   --100% of the graduate students are from the physical sciences

   --educational and/or career objectives: college teaching, museum work, administration of science. Mostly college teaching.

0570-p01

PROGRAM IN LAW, SCIENCE & MEDICINE (LSM)
Yale Law School
127 Wall St.
New Haven, CT 06520

Dr. Jay Katz, Director
203/436-0232

HISTORY

1. LSM was started in 1973 with a grant from the Commonwealth Fund of New York.

2. Objectives: provides a focus for work by faculty, students, and fellows in a number of related areas of concern, including legal and ethical issues in biomedical and behavioral science research, administration of medical care delivery systems, social control of science and technology. Rests on assumption that the exploration of social and legal problems arising from medical and scientific progress will benefit from collaborative work among persons from many disciplines.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. LSM receives outside funding.

INSTITUTIONAL ARRANGEMENTS

1. LSM is under the jurisdiction of the Law School.

2. Relationship with traditional departments: LSM is integrated into the Law School curriculum and all courses and seminars can be taken by undergraduate and graduate law students. Informal relationships with other departments within Yale University, particularly the Medical School. Also, a number of students attend program course offerings either for credit or as auditors.

CURRICULUM

1. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

2. Approximate percent of courses generally:

a. problem oriented	100%
b. systemic/synoptic/descriptive, etc. in approach	0%

CONSTITUENCY

1. Students taking courses.

   --95% graduates
   5% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   law
   social sciences
   humanities

2. Faculty teaching program-sponsored courses.

   --appointment and promotion of faculty is by regular department.

DELAWARE

0580-p01

CULTURE OF BIOMEDICINE (CBM)
University of Delaware
Newark, DE 19711

Dr. Edward Lurie, Director
302/738-2840

HISTORY

1. CBM began in 1971 in response to the university's desire to establish an innovative teaching enterprise for the education of premedical and medical students. At that time a university medical school was contemplated. When this proved impractical, it was decided to concentrate on the undergraduate level basically with graduate courses offered to students in the biomedical sciences.

2. Objectives: interdisciplinary program focusing diverse humanistic and related social scientific approaches on the area of biomedicine. Functions by means of 3 integrated and innovative conceptions: the 4 course core sequence, the faculty resource pool concept, and the advanced elective interdisciplinary curriculum.

DEGREES OFFERED

1. No degrees offered. CBM is distinctly not a degree program. For a degree to be offered in it would obviate the philosophy of the program, which is elective and coordinate with traditional humanities offerings.

FUNDING

1. % of total budget from outside sources 60%
   % of total budget from institution 40%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. CBM is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: CBM operates in close cooperation with such traditional departments as philosophy, English, history, and sociology. In essence, each of the "core" courses is recommended by these departments to their undergraduate students as a useful insight into, for example, the philosophical bases of medical/moral problems. The 4 core courses are in no wise intended to replace extant traditional offerings. Rather, they are offered as alternatives taught by established and recognized philosophers, historians, and professors of English and also carrying College of Arts and Science credit "for the fulfillment of Humanities requirements toward graduation." In terms of advanced elective courses, a course such as Literature & Science, for example, represents an offering in the English Department that the faculty of that department have already deemed valuable for the department's curricular improvement. The course is offered as a philosophy or English course with students receiving major credit toward a degree in the department for that course and is also offered as part of the program. The department benefits since the program is able to pay for the planning and teaching time of the faculty member engaged in teaching the course, a course that represents his or her academic specialty but that he or she might not ordinarily be able to offer given the constraints of departmental overall needs and enrollment. The program enjoys excellent cooperation from all humanities and humanistically oriented social science departments.

3. Other groups involved in STS studies: Science, Technology, & Society Program, with which CBM shares faculty.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	50%

5. A "core" faculty of 4 individuals aided by an associated faculty group of 6 plan and approve courses. Ultimately it is planned to expand the program to include 6 core faculty and about 10 associated faculty.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:	agriculture and life sciences	30%
	humanities	20%
	physical sciences	10%
	social sciences	10%
	health sciences	30%

--educational and/or career objectives: (1) professional careers in the health services and allied health professions; (2) professional careers in medicine and other health related fields; (3) doctorates, biomedicine; and (4) general liberal arts education.

2. Faculty teaching program-sponsored courses.

--approximate % from:	humanities	70%
	social sciences	20%
	biomedical and health sciences	10%

--appointment and promotion of faculty is by program and regular department.

0580-p02

MARINE AFFAIRS PROGRAM (MAP)

University of Delaware
College of Marine Studies
Newark, DE 19711

Dr. Gerard Mangone, Director
302/738-1212

HISTORY

1. MAP was part of the development of a new graduate professional College of Marine Studies in 1971-72.

2. Objectives: to provide instruction for marine scientists on the historical, legal, political, and economic aspects of the coastal zone, oceans, and seabed; to provide a degree program in marine affairs for social scientists and lawyers in which exposure to the underlying concepts of marine biology, chemistry, engineering, physics, and geology would be required.

DEGREES OFFERED

1. Graduate: M.S., M.A., Ph.D.

FUNDING

1. % of total budget from outside sources 35%
   % of total budget from institution 65%

2. % of outside funds from private foundations 20%
   % of outside funds from government agencies 80%

INSTITUTIONAL ARRANGEMENTS

1. MAP is under the jurisdiction of the College of Marine Studies.

2. Relationship with traditional departments: faculty members have joint appointments in traditional departments where applicable.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Courses are part of the curriculum of the College of Marine Studies.

4. Approximate percent of courses generally:
   a. problem oriented 25%
   b. systemic/synoptic/descriptive, etc. in approach 75%

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --approximate % from: law 30%
   social sciences 70%

   --educational and/or career objectives: positions in government, industry, and public interest groups relating to direction and administration of marine affairs.

2. Faculty teaching program-sponsored courses.

   --approximate % from: law 20%
   social sciences 80%

   --appointment and promotion of faculty is by program and college.

0580-p03

SCIENCE, TECHNOLOGY, & SOCIETY (STS)
University of Delaware
Philosophy Department
Newark, DE 19711

Dr. Paul T Durbin, Director
302/738-2350

HISTORY

1. STS began in 1970. During a university-wide reconsideration of programs and priorities called New University Design, a committee was established to put together an STS program. The proposal for a non-departmental program impacting the whole university at all degree levels was turned down in favor of an undergraduate start. This became a possible student option under a new B.A. in Liberal Studies program, but no more. The committee now operates under the aegis of another new program, the Center for the Study of Values, which is primarily conference and research oriented.

2. Objective: focuses on conference-related values-oriented aspects of technology. An example is the development of philosophy of technology as a new field. The major objective is thus exerting an influence on the scholarly community, though not without general education spillovers.

DEGREES OFFERED

1. Undergraduate: B.A. in Liberal Studies.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. STS is under the jurisdiction of the Philosophy Department.

2. Relationship with traditional departments: the Values Center is administered out of the Philosophy Department. STS committee is under the direction of a Philosophy Department faculty member (who also holds a joint appointment with the Culture of Biomedicine Program).

CURRICULUM

1. Priority is given to research.

DISTRICT OF COLUMBIA

0590-p01

SCIENCE/TECHNOLOGY POLICY & ADMINISTRATION PROGRAM (STPA)
The American University
College of Public Affairs
Center for Technology & Administration
Washington, DC 20016

Dr. Lowell H Hattery, Director
202/686-2513

HISTORY

1. Courses in R&D management were introduced in 1949, and the present program has evolved continuously since that time. Program responsibility, presently in the Center for Technology and Administration, College of

Public Affairs, was for most of the intervening period located in the School of Government and Public Administration, where several complementary science policy courses are still offered.

2. Objective: to provide graduate level appreciation and preparation in science policy and research administration at master's and doctoral levels (doctorate is in public administration). Special emphasis on education for junior and mid-career scientists, engineers, and administrators.

DEGREES OFFERED

1. M.S., Ph.D. This field may be elected by doctoral candidates in Political Science or Public Administration.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. STPA is under the jurisdiction of the College of Public Affairs.

2. Relationship with traditional departments: complementary science policy courses taught in School of Government and Public Administration.

3. Other groups involved in STS studies: individual undergraduate appreciation courses in several departments; no formal relationship with STPA.

CURRICULUM

1. Priority is given to research and teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Approximate percent of courses generally:

a.	problem oriented	20%
b.	systemic/synoptic/descriptive, etc. in approach	80%

4. A faculty-student committee which governs educational policy for the Center for Technology and Administration plans and approves STPA courses.

CONSTITUENCY

1. Students taking courses.

--100% graduates

--student distribution by field (listed in decreasing numerical order):

engineering
physical sciences
business and public administration
social sciences
agriculture and life sciences

--educational and/or career objectives: administration and policy roles associated with science and engineering programs, public and private.

2. Faculty teaching program-sponsored courses.

--approximate % from:

business and public administration	40%
engineering	20%
physical sciences	20%
social sciences	20%

Most faculty have at least one degree in science or engineering.

--appointment and promotion of faculty is by regular department.

0600-p01

CENTER FOR BIOETHICS (CB)
Kennedy Institute for the Study of Human Reproduction
& Bioethics
Georgetown University
Washington, DC 20057

Dr. LeRoy Walters, Director
202/625-2371

HISTORY

1. CB was founded in 1971 with a grant from the Joseph P Kennedy, Jr. Foundation as a component of the Kennedy Institute. Dr. Andre E Hellegers, obstetrician-gynecologist and director of the Kennedy Institute, conceived the idea of bringing together ethicists and biomedical researchers and practitioners to do interdisciplinary research.

2. Objectives: primary objective is to promote interdisciplinary research and publication in the field of bioethics. A second goal is to develop an educational program in bioethics in cooperation with other university departments and professional schools. This collaborative program includes a Ph.D. in Philosophy with a special concentration in bioethics. Other goals of the center include: the establishment of a comprehensive special library in bioethics; the development of an automated information-retrieval system for the field; and the publication of basic research tools for the study of bioethics, including the annual *Bibliography of Bioethics* and the forthcoming *Encyclopedia of Bioethics*.

DEGREES OFFFERED

1. Undergraduate: concentration in bioethics can be taken through interdisciplinary major.

   Graduate: M.A., Ph.D. These are graduate degrees in Philosophy with special concentration in bioethics.

FUNDING

1. % of total budget from outside sources 80%
   % of total budget from institution 20%

2. % of outside funds from private foundations 70%*
   % of outside funds from government agencies 30%

   *includes 2 endowed chairs

INSTITUTIONAL ARRANGEMENTS

1. CB is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: cosponsors courses with various departments; faculty members of CB participate in courses in several additional departments and professional schools. There are 7 long-term faculty members, each of whom holds a joint appointment in a liberal arts or medical school department or both. A joint graduate program has been established with the Department of Philosophy.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments and other programs. All courses offered through a university department or the School of Summer and Continuing Education.

4. Approximate percent of courses generally:

   a. problem oriented 25%
   b. systemic/synoptic/descriptive, etc. in approach 25%
   c. combination of a and b 50%

5. The center's long-term faculty members function as a curriculum committee. In addition, there is a consultation with the Philosophy Department in curriculum planning.

CONSTITUENCY

1. Students taking courses.

   --20% graduates
   80% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   social sciences
   agriculture and life sciences
   humanities
   physical sciences

   --educational and/or career objectives: many government majors and pre-medical students take courses in bioethics. In addition, there is a growing number of graduate students in philosophy who wish to specialize in this field.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	30%
humanities	55%
law	15%

--appointment and promotion of faculty is by regular department.

0610-p01

GRADUATE PROGRAM IN SCIENCE, TECHNOLOGY & PUBLIC POLICY (STPP)

George Washington University
709 Library
2130 H St., NW
Washington, DC 20052

Dr. John M Logsdon, Director
202/676-7292

HISTORY

1. STPP was established in 1970 to provide focused educational complement to the other activities of the Program of Policy Studies in Science & Technology (PSST).

2. Objective: training of those able to understand the public policy issues posed by science and technology and to develop and implement responses to those issues.

DEGREES OFFERED

1. Graduate: M.A.

FUNDING

1. % of total budget from outside sources 80%
   % of total budget from institution 20% (faculty salaries)

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. STPP is jointly sponsored by the School of Public & International Affairs and PSST.

2. Relationship with traditional departments: faculty drawn from departments and courses offered through them.

3. Other groups involved in STS studies: PSST, Law, Science & Technology Program; there is coordination and cooperation between these programs and STPP.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	50%

CONSTITUENCY

1. Students taking courses.

   --95% graduates
   5% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   social sciences
   physical sciences
   agriculture and life sciences
   humanities
   engineering

   --educational and/or career objectives: in the main, career employment in policy analysis positions in or near government.

2. Faculty teaching program-sponsored courses.

   --100% from social sciences

   --appointment and promotion of faculty is by regular department.

0610-p02

PROGRAM OF POLICY STUDIES IN SCIENCE & TECHNOLOGY (PSST)
George Washington University
714 Library
2130 H St., NW
Washington, DC 20052

Dr. Louis H Mayo, Director
202/676-7382

HISTORY

1. PSST was developed by the university in 1966 with a grant from NASA in an effort to determine the means by which the knowledge and analytical resources of a major university in the capital might be usefully related to the on-going public policy process by assisting with clarification of important policy choices while strengthening the research and instructional programs of the university.

2. Objective: research group specializing in science policy analysis, especially technology assessment, technology transfer, economic conversion, R&D management, transportation, and technological innovation.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 90%
   % of total budget from institution 10%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. PSST is autonomous/independent/intercollegiate.

2. Other groups involved in STS studies: Graduate Program in Science, Technology & Public Policy (STPP). STPP is a group within PSST.

CURRICULUM

1. Priority is given to research.

GEORGIA

0780-p01

OFFICE OF HUMANITIES
Medical College of Georgia
School of Medicine
Augusta, GA 30902

Dr. Russell R Moores, Director
404/828-2147

HISTORY

1. The Office of Humanities, which works directly from the dean's office in the School of Medicine, was established in July 1971. It was an outgrowth of a committee formed by the dean in 1967 to present 2-3 programs a year on "Medicine in the Modern World."

2. Objective: to introduce students to medicine beyond the molecular level.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the dean's office in the School of Medicine.

2. Relationship with traditional departments: faculty from various departments and schools are supporters of the activities of the program.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing non-interacting guest lecturers.

3. Approximate percent of courses generally:

a.	problem oriented	0%
b.	systemic/synoptic/descriptive, etc. in approach	0%
c.	combination of a and b	100%

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--100% graduates

--100% from medicine

--educational and/or career objectives: medicine.

2. Faculty teaching program-sponsored courses.

--100% from medicine

--appointment and promotion of faculty is by program.

HAWAII

0830-p01

HAWAII RESEARCH CENTER FOR FUTURES STUDY
University of Hawaii
2424 Maile Way #711
Honolulu, HI 96822

Dr. Richard J Barber, Acting Director
808/948-7879

HISTORY

1. The center was created in 1971 by the Hawaii State Legislature; the mandate was revised by the legislature in 1974. It was assigned to the Social Sciences and Linguistics Institute, University of Hawaii, for administrative purposes and was combined with that institute's program in futures research. James A Dator, professor of political science, was named director (he is currently on leave to the OECA, Toronto).

2. Objectives:

   a. to serve as a research arm of the commission on the year 2000, the state commission on population and the Hawaiian future, the commission on manpower and full employment, and such other public agencies as may properly require its services and assistance in locating research arrangements for such studies, the costs and final decisions of which shall be the responsibility of the requesting agencies.

   b. to encourage and promote invention and experimentation in futures study, planning, and design.

   c. to maintain an inventory of studies, research, and other information, including groups or persons concerned with development and acquisition of models, techniques and other tools, and capability for the effective monitoring, measuring, and forecasting of crucial aspects of Hawaii's socioeconomic-environmental system over the immediate, intermediate, and long-range future, including the design of systems to assist and stabilize the state's construction industry.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 100%*
   % of total budget from institution 0%

   *basic budget allocation from the state legislature (yet to be released by the state administration)

INSTITUTIONAL ARRANGEMENTS

1. The center is under the jurisdiction of a research institute, the Social Sciences and Linguistics Institute, University of Hawaii.

2. Relationship with traditional departments: informal/informational.

3. Other groups involved in STS studies: Engineering Department, Environmental Center, Pacific Urban Planning Studies Program, Alternative Futures Program. These groups have informal ties with the center and some collaborative projects.

CURRICULUM

1. Priority is given to research.

IDAHO

0840-p01

HUMAN ECOLOGY DIMENSION PROGRAM (HED)

The College of Idaho
Caldwell, ID 83605

Committee: Dr. Louie W Attebery, Lyle M Stanford, Ralph O Marshall
208/459-5525 208/459-5332 208/459-5333

HISTORY

1. HED began to take students in the fall of 1973 after 2 years of planning.

2. Objectives:

   a. to utilize the many courses of the College of Idaho to give the students a directed, interdisciplinary, human ecology experience.

   b. to examine the nature of human ecology as humans have practiced it. Continual attempt to discover the possible existence of and nature of principles of human ecology.

   Double major program.

DEGREES OFFERED

1. Undergraduate: B.S.

FUNDING

1. % of total budget from outside sources 5%
   % of total budget from institution 95%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. HED is interdepartmental.

2. Relationship with traditional departments: HED uses all departments. It is based upon 3 fundamental seminars and a major senior paper. The remainder of this second major of a double major program is made up from courses chosen from all majors.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines (to some degree), and utilizing non-interacting guest lecturers (to some degree).

3. Courses jointly sponsored by departments.

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

business and public administration	10%
humanities	40%
physical sciences	50%

--educational and/or career objectives: public health administration, political administration, public administration, environmental administration, social management, social ecology, ecological management, and urban management.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	20%
business and public administration	10%
humanities	30%
physical sciences	10%
social sciences	30%

--appointment and promotion of faculty is by regular department.

0850-p01

TECHNOLOGY & HUMAN AFFAIRS (THA)
University of Idaho
Moscow, ID 83843

Dr. Dwight S Hoffman, Director
208/885-6793

HISTORY

1. THA began in the fall of 1971 as a result of conferences with faculty in humanities and social sciences who indicated their students should have a course explaining what engineering technology is all about.

2. Objective: to bring engineering students and students from the social sciences and business fields together to discuss the cause and effect relationship between technology and society.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. THA is under the jurisdiction of a school or college with the university.

2. Relationship with traditional departments: practically none.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. Courses are planned by instructors. Approval is through college and university channels.

CONSTITUENCY

1. Students taking courses.

--10% graduates
90% undergraduates

--approximate % from:

business and public administration	30%
education	10%
engineering	30%
humanities	10%
social sciences	20%

--educational and/or career objectives: most plan to, in some way, become involved in decisions made by society concerning future technological developments and practices.

2. Faculty teaching program-sponsored courses.

--100% from engineering

--appointment and promotion of faculty is by regular department.

ILLINOIS

0870-p01

NATURAL SCIENCE-MATHEMATICS DIVISION OF GENERAL EDUCATION PROGRAM (NSM)
DePaul University
2323 North Seminary Ave.
Chicago, IL 60614

Dr. Avrom A Blumberg, Director
312/321-8189

HISTORY

1. In the autumn of 1969, DePaul began a formal general education program (called DePaul College) to serve all undergraduates. There are 4 divisions within the college, one of which is Natural Sciences & Mathematics (which comprises biology, chemistry, mathematics, and physics). Initially taught citizen-oriented aspects of the disciplines, and gradually developed a full set of multidisciplinary, problem-oriented courses. Teach courses in cooperation with faculty of the other divisions. Cooperation has been more common with NSM perhaps because the socially or politically significant problems demand outside opinions.

2. Objectives: to have the students become more aware of the scientific and technological bases for a selection of current problems (e.g., arms control, nuclear power, resource allocation, population control, ethics in medical science, etc.); to see how science and technology can contribute, in part, to the solutions of these problems; and to have them become acquainted with the limitations of science and technology. The long-range goals: to help students better cope with their technological society, and possibly to encourage their fuller participation in public-issue discussions, and maybe to make decisions more knowledgeably.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding. Have had Title VI funding for equipment, but infrequently.

INSTITUTIONAL ARRANGEMENTS

1. NSM is under the jurisdiction of DePaul College.

2. Relationship with traditional departments: use the Liberal Arts & Sciences faculty. Although some professional colleges within the university at first resisted the idea that 40% of each undergraduate's education was to be in general education (with roughly 4-7% in NSM), the program is reasonably popular with students and, by contagion, with their faculty. In the sciences, especially in chemistry and

physics, the sharp decline in majors has meant that general education, in NSM, has attained a rather important role. Needless to say, these departments support the NSM program enthusiastically; favorable comments from students further encourage this effort.

3. Other groups involved in STS studies: Honors Program, Program II of the Department of Physics. NSM has incorporated the Honors Program and 4 of the original 12 Program II courses.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments, in the sense that NSM solicits faculty from appropriate departments.

4. Approximate percent of courses generally:

a. problem oriented	50-65%
b. systemic/synoptic/descriptive, etc. in approach	35-50%
c. combination of a and b	10%

5. In the process of planning NSM courses, the first problem is to avoid arousing suspicions of departments that the program or course will use disciplinary material improperly, i.e., will a physicist teach "biology." Then, a full syllabus with aims, goals, purposes, and objectives is prepared and examined by the full set of division heads and dean, and the dean of faculties, for approval.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

agriculture and life sciences	15%
business and public administration	45%
humanities	10%
physical sciences	5%
social sciences	25%

--educational and/or career objectives: varied. In Commerce, accounting is most popular. In Liberal Arts & Sciences, nursing. In Psychology, clinical practice. In Political Science, law. In Biology, medicine, medical technology, and biology.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	15%
physical sciences	55%
social sciences	7%
mathematics	23%

--appointment and promotion of faculty is by program.

0870-p02

PROGRAM II
DePaul University
Department of Physics
2323 North Seminary Ave.
Chicago, IL 60614

Dr. Edwin J Schillinger, Director
312/321-8175

HISTORY

1. Program II was formulated in the years 1966-70 under the aegis of an NSF-COSIP grant. Began as an "alternative physics major program" for students seeking careers in fields allied to physics. It soon evolved into a program for all students. As such, its concern is the students as future citizens rather than as career-oriented people.

2. Objective: to provide access to all students who wish to learn more about the physical universe.

DEGREES OFFERED

1. Undergraduate: B.S., B.A.

FUNDING

1. Outside funding received in the past, but support has run out.

INSTITUTIONAL ARRANGEMENTS

1. Program II is under the jurisdiction of the Department of Physics.

2. Relationship with traditional departments: Program II is quite non-traditional but fully integrated with other programs in the Department of Physics. Some students structure individualized programs with elements drawn from Program II as well as from the conventional program.

CURRICULUM

1. Priority is given to teaching.

2. Courses jointly sponsored by deparments.

3. Approximate percent of courses generally:

a. problem oriented	20%
b. systemic/synoptic/descriptive, etc. in approach	80%

4. Quality control is in the hands of a physics faculty group with approval residing in the dean.

CONSTITUENCY

1. Students taking courses.
   --100% undergraduates

--student distribution by field (listed in decreasing numerical order):

social sciences
other
business and public administration
humanities
agriculture and life sciences
law
physical sciences

--educational and/or career objectives: law school.

2. Faculty teaching program-sponsored courses.

--100% from physical sciences

--appointment and promotion of faculty is by regular department.

0900-p01

EDUCATION & EXPERIENCE IN ENGINEERING (E^3 PROGRAM)
Illinois Institute of Technology
Chicago, IL 60616

Dr. TP Torda, Director
312/567-3190, 3191

HISTORY

1. E^3 began in June 1971.
2. Objective: Interdisciplinary undergraduate engineering curriculum based on project work throughout 4 undergraduate years.

DEGREES OFFERED

1. Undergraduate: B.S. in Engineering

FUNDING

1. Outside funding received for first 5 years of program (1971-76).

% of total budget from outside sources	100%
% of total budget from institution	0%

2.

% of outside funds from private foundations	0%
% of outside funds from government agencies	100%

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of a school or college within the institute.
2. Relationship with traditional departments: uses faculty from various departments on a part-time basis, assigned to E^3 Program Center.

CURRICULUM

1. Priority is given to teaching.
2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.
3. Approximate percent of curriculum generally:
    - a. problem oriented 100%
    - b. systemic/synoptic/descriptive, etc. in approach 0%
4. The E^3 Program Center faculty plan and approve courses.

CONSTITUENCY

1. Students taking courses.

    --100% undergraduates

    --100% from engineering

    --educational and/or career objectives: "professional problem solver"; engineering with awareness of social responsibilities.

2. Faculty teaching program-sponsored courses.

    --approximate % from:

--approximate % from:	engineering	30%
	humanities	15%
	law	5%
	physical sciences	25%
	social sciences	20%
	design	5%

    --appointment and promotion of faculty is by program and regular department.

0950-p01

PROGRAM OF RESEARCH ON THE MANAGEMENT OF RESEARCH & DEVELOPMENT (POMRAD)

Northwestern University
Department of Industrial Engineering & Management Sciences
The Technological Institute
Evanston, IL 60201

Dr. Albert H Rubenstein, Director
312/492-3680

HISTORY

1. POMRAD was started at Northwestern University in 1959. Dr. Rubenstein brought it with him from MIT, where he started it in about 1954.
2. Objective: research program focused upon increasing the understanding of the R&D management process.

DEGREES OFFERED
1. Graduate: Ph.D.

FUNDING
1. % of total budget from outside sources 100%
% of total budget from institution 0%

2. % of outside funds from private foundations 0%
% of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS
1. POMRAD is under the jurisdiction of the Department of Industrial Engineering & Management Sciences.

2. Relationship with traditional departments: POMRAD is an integral part of a department.

3. Other groups involved in STS studies: Center for Interdisciplinary Study of Science & Technology (CISST). There is close cooperation and informal affiliation between CISST and POMRAD.

CURRICULUM
1. Priority is given to research.

2. One formal course is jointly sponsored by departments.

CONSTITUENCY
1. Students taking courses.

--100% graduates

--student distribution by field (listed in decreasing numerical order):

engineering
physical sciences
business and public administration

1010-p01

MEDICAL EDUCATION, SOCIETY, & THE HUMANITIES (MESH)
Southern Illinois University Medical School
PO Box 3926
Springfield, IL 62708

Dr. Glen W Davidson, Director
217/782-4262

HISTORY
1. MESH began in 1973 as a formal and required part of the M.D. curriculum. Since much of professional education is traditional, the Curriculum Committee wanted one unit to more readily respond to the concerns of the students and at the same time prepare the student to recognize the context in which medicine is practiced.

2. Objectives:

   a. to assist students to integrate the insights of the behavioral and social sciences, and the humanities, with clinical skills.

   b. to provide perspective on the cultural and historical determinants of the practice of medicine.

   c. to assist students in making career choices.

   d. to provide understanding of the role and scope of public health agencies.

   e. to prepare students for making informed ethical, legal, and economic decisions.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. MESH is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: under the control of an interdisciplinary curriculum committee, coordinated by the director, and responsible to the school's curriculum committee. The core faculty numbers approximately 20 with an additional 22 faculty or professional personnel assisting. All faculty have appointments from one of the school's departments.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and utilizing non-interacting guest lecturers.

3. Courses sometimes jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	70%
b. systemic/synoptic/descriptive, etc. in approach	20%
c. combination of a and b	10%

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --approximate % from:

business and public administration	5%
humanities	5%
medical sciences	80%
social sciences	10%

--educational and/or career objectives: physicians.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	humanities	5%
	social sciences	5%
	medical school	90%

--appointment and promotion of faculty is by regular department.

1020-p01

CONCEPTUAL FOUNDATIONS OF SCIENCE (CFS)
University of Chicago
Chicago, IL 60637

Dr. Arnold W Ravin, Director
312/753-2654

HISTORY

1. CFS was started about 7 years ago as an outgrowth of an undergraduate program in history and philosophy of science, directed by Dudley Shapere.

2. Objective: to study the foundations, structure, methods, and interpretation of science, both contemporary and in the rational aspects of its historical development.

DEGREES OFFERED

1. Graduate: M.A., Ph.D.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. CFS is under the jurisdiction of the Humanities Division.

2. Relationship with traditional departments: selects faculty from broad range of departments in the humanities, social sciences, and natural sciences. Faculty members share an interest in the objectives of the program, and are willing to collaborate in administration of a graduate program.

3. Other groups involved in STS studies: Morris Fishbein Center for the Study of History of Science and Medicine; Committee on Social Thought. These groups share some faculty members and collaborate in offering and use of courses with CFS.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	75%

CONSTITUENCY

1. Students taking courses.

--25% graduates
75% undergraduates

--approximate % from:		
	agriculture and life sciences	40%
	humanities	10%
	physical sciences	40%
	social sciences	10%

--educational and/or career objectives: academic teaching and research, for the most part.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	agriculture and life sciences	30%
	humanities	30%
	physical sciences	30%
	social sciences	10%

--appointment and promotion of faculty is by regular department.

1040-p01

INSTITUTE OF COMMUNICATIONS RESEARCH (ICR)
University of Illinois, Urbana-Champaign
222b Armory
Champaign, IL 61820

Dr. James W Carey, Director
217/333-1549

HISTORY

1. ICR was initiated in 1947 at the encouragement of the director of the School of Journalism, Frederick Siebert. Its creation reflected the great interest in communications and communications technology that came out of WWII: cybernetics and machine-machine communication, propaganda and persuasion research, and the development of television.

2. Objectives: to conduct research and teaching on all forms of communication, mass and interpersonal; to develop a tradition of analysis and criticism of the mass media of communication; to provide research services to the university community; to develop a program of graduate studies; and to examine the effect of communication technology on culture and social organization.

DEGREES OFFERED

1. Graduate: Ph.D.

FUNDING

1. % of total budget from outside sources 30%
   % of total budget from institution 70%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. ICR is under the jurisdiction of a school within the university.

2. Relationship with traditional departments: share faculty on joint appointments; cooperate in research projects; share in the offering of courses.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 20%
   b. systemic/synoptic/descriptive, etc. in approach 80%

5. The director of ICR is in charge of course curriculum development and appoints ad hoc committees as needed.

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --approximate % from: humanities 10%
   social sciences 90%

   --educational and/or career objectives: mainly to do research and teaching in universities, but also to work for governmental agencies (FCC, USIA, Post Office), to work in medical centers on communications technology, and in private industry (Bell Labs, CBS, IBM).

2. Faculty teaching program-sponsored courses.

--approximate % from:	business and public administration	5%
	engineering	5%
	humanities	30%
	social sciences	60%

--appointment and promotion of faculty is by program and regular department, but generally by program.

1040-p02

SLOAN FOUNDATION PROGRAM

University of Illinois, Urbana-Champaign
Urbana, IL 61801

Dr. JJ Desmond, Director
217/333-2153

HISTORY

1. The university was solicited by the Sloan Foundation in January 1972. Support from the Sloan Foundation provided the means to make more explicit the university's goal to address a broad range of societal questions. The formal conduct of the Sloan-supported program came to an end in 1974; however, there has been a continuation of resource commitments to achieve further progress in fulfillment of the Sloan goals.

2. Objectives: approximately 80 faculty members were involved in the formal Sloan program, which provided them with an opportunity to compare disparate disciplinary perspectives of the energy problem. Participants were drawn from engineering, social sciences, law, and the humanities. These broader perspectives were brought into the classroom by engineering professors teaching their students in engineering course work. An additional objective draws upon Sloan participants to engage in interdisciplinary research under the general heading of technology assessment and forecasting. The collaborative research mode is the objective receiving the greatest emphasis at the present time.

DEGREES OFFERED

1. No degrees are being offered specifically related to STS programs; however, it is possible to get a disciplined degree which could have substantial STS emphasis.

FUNDING

1. No outside funding. Five interdisciplinary research efforts are being explored and are in the preliminary stages of formation and preparation of research support proposals. These exploratory efforts are, of course, being underwritten through time contributed by participating faculty.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of a school or college within the university.

2. Relationship with traditional departments: under the program's current emphasis of developing new initiatives in technology assessment and forecasting and similar socially related activities, it attempts to draw appropriate faculty participants from the existing academic departments and give their effort no greater institutional rigidity than that implied by the word "group." Faculty participants continue to be identified with their traditional departments and no organization takes credit for the work being accomplished beyond the participating departments.

3. Other groups involved in STS studies: Institute for Environmental Studies, the Center for Advanced Computation, the Office of Coal Research and Utilization, the Office of Transportation, and others. The Institute for Environmental Studies and the Center for Advanced Computation both tend to have some degree of autonomy, but rely upon cycling academic departmental faculty through their program to enable the conduct of interdisciplinary research. The Office of Coal Research, the Office of Transportation Research, and the Sloan Program activities tend to be facilitating agencies exposing faculty to individual collaborative research opportunities and developing means of support.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

    a. problem oriented 20%
    b. systemic/synoptic/descriptive, etc. in approach 80%

5. There is a departmental and college level curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

    --20% graduates
    80% undergraduates

    --approximate % from: engineering 50%
    social sciences 50%

    --educational and/or career objectives: traditional, technical, and professional career goals dominate.

2. Faculty teaching program-sponsored courses.

--approximate % from: engineering 50%
social sciences 50%

--appointment and promotion of faculty is by regular department.

INDIANA

1070-p01

ADVANCED STUDIES IN SCIENCE, TECHNOLOGY, & PUBLIC POLICY (AS)
Indiana University
Bloomington, IN 47401

Dr. Lynton K Caldwell, Director
812/337-8015, -8485

HISTORY

1. AS was established in 1965 as an autonomous multi-disciplinary program of studies associated with the Department of Political Science. The program was guided in its initial phase by a multidisciplinary advisory committee and was assisted in 1969 by a "center grant" from the NSF. Since 1965, the program has provided a special emphasis at Indiana for federal executives attending the university under the Education for Public Management Program of the US Civil Service Commission. The program is also currently associated with the School of Public & Environmental Affairs.

2. Objectives: to provide a focus for research, instruction, and cross-disciplinary dialogue on the interactions between science, technology, and public policy. Emphasis has been on development of instructional methods, and upon research in public policies relative to the environment, energy, and the biological sciences. The principal instructional feature is a year-long seminar in science, technology, and public policy.

DEGREES OFFERED

1. Undergraduate: concentration on science policy can be achieved through an independent major.

   Graduate: graduate minor in Science, Technology, & Public Policy with graduate minor field of Public Law & Policy, Department of Political Science.

2. A special degree program in science policy is believed to be unnecessary in view of numerous major and minor options under the M.A., M.P.A., and Ph.D.

FUNDING

1. % of total budget from outside sources 90%
   % of total budget from institution 10%*

   *this does not include faculty salaries, which would exceed outside aid

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. AS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: principal courses are cross-listed in the Department of Political Science and the School of Public & Environmental Affairs, although a few are listed only in the latter. Faculty members do not hold appointments in the program, their participation being a part of their normal departmental work.

3. Other groups involved in STS studies: Department of History & Philosophy of Science, Department of Sociology, School of Business. AS has no formal relationships to science policy instruction in these departments, but faculty interact informally. Principal interaction is with the Sociology of Science group in the Department of Sociology. The Environmental Studies program at Indiana was promoted in its earliest stages by faculty members associated with the science policy program (e.g., by members of the faculty advisory committee).

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs. Some courses jointly sponsored by 2 regular academic units.

4. Approximate percent of courses generally:

   a. problem oriented 25%
   b. systemic/synoptic/descriptive, etc. in approach 50%
   c. combination of a and b 25%

5. There is no specific curriculum committee. Course proposals must be approved by the departments or schools in which they would be offered.

CONSTITUENCY

1. Students taking courses.

   --90% graduates
   10% undergraduates

--approximate % from:		
	agriculture and life sciences	2%
	business and public administration	50%
	humanities	5%
	law	2%
	physical sciences	1%
	social sciences	40%

--educational and/or career objectives: varied. Principal category is mid-career graduate students who have worked and expect to continue to work in government agencies with a major technological or scientific emphasis. Some from the sciences are interested in the social or policy implications of their professions. Ph.D. candidates more often elect the field as a minor than as a major.

2. Faculty teaching program-sponsored courses.

--approximate % from:	Core	Associated
business and public administration	0%	30%
law	0%	20%
physical sciences	50%	0%
social sciences	50%	50%

--appointment and promotion of faculty is by regular department.

1070-p02

CITIZEN & SCIENCE PROJECT

Indiana University
The Poynter Center
Sycamore Hall 217
Bloomington, IN 47401

Mrs. Marcel La Follette, Direcror
812/337-2735

HISTORY

1. The project began in 1974. At the request of primarily members of the science community at Indiana University, the Poynter Center on Public and American Institutions funded the development of the course, teaching of the course, and production of videotapes from guest lecturers. The intent of the Poynter effort has been to provide an interdisciplinary forum for the discussion of science as an institution, to examine current criticisms and defenses of science from within and without the scientific community, and to provide the knowledge of the structure, operation, and development of the institution which is deemed necessary for civic evaluation of science.

2. Objectives: offers course, "The Citizen and Science," provides advice and instructional materials to other instructors in Indiana, produces color videotapes of guest lecturers and panels, writing course guide for instructors of similar courses.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 100%
   % of total budget from institution 0%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the Poynter Center, a research project within the Indiana University (Bloomington) campus structure.

2. Relationship with traditional departments: offers advice and resources to other departments, supplies any audiovisual materials developed to any interested instructor. The course "The Public Role of Science in the United States" is cross-listed with the School of Public & Environmental Affairs and the School of Education, and is sponsored by the College of Arts & Sciences as part of their experimental curriculum.

3. Other groups involved in STS studies: School of Public & Environmental Affairs, Advanced Studies in Science, Technology, & Public Policy; Department of Sociology has offered an undergraduate course on the sociology of science and contains several research groups in this area. There is full cooperation between these programs and the Citizen & Science Project. It is hoped that the program's course would help to "feed" students into the more specialized courses, or serve as an adjunct or initial course for students majoring in this area.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%

4. There is an advisory committee (6 faculty members and members of the Poynter administrative staff) to the course and project.

CONSTITUENCY

1. Students taking course.

   --100% undergraduates

--approximate % from:		
	humanities	30%
	life sciences	20%
	physical sciences	20%
	social sciences	30%

--educational and/or career objectives: science journalists, biologists, science education (secondary), political scientists.

2. Faculty teaching program-sponsored course.

--100% from science communication

--appointment and promotion of faculty is by program.

1100-p01

CURRICULUM IN SCIENCE & CULTURE

Purdue University
Humanities, Social Science, & Education
Stanley Coulter Hall
Lafayette, IN 47907

Lee Trachtman, Dean
317/749-2504

HISTORY

1. In 1969, 6 faculty members met independently and voluntarily to plan an interdisciplinary program. The plan they drew up was accepted by the curriculum committee and school senate. The steering committee continued to expand the program in the years that followed. A $94,000 NEH grant in 1974 has lent increased stability to the program.

2. Objectives: to provide an interdisciplinary undergraduate program which focuses on the historical and contemporary role of science in western society; to offer seminars which concentrate on specific problems and issues within this context.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1.

% of total budget from outside sources	10%
% of total budget from institution	90%*

*these are necessarily approximate figures, since most of the courses are normal departmental offerings and serve the program only incidentally. Therefore, figures are pro-rated appropriately.

2.

% of outside funds from private foundations	0%
% of outside funds from government agencies	100%

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the School of Humanities, Social Science, & Education.

2. Relationship with traditional departments: with the exception of 2 seminars, all courses are regular departmental offerings (the design of some of which, to be sure, was stimulated by the interests of the program). The 2 interdisciplinary seminars are offered by the General Studies Department, an administrative arm of the Office of the Dean. These seminars have been staffed through a combination of voluntary effort by faculty members and cooperation of departments. The 1975, 1976, and 1977 Senior Seminars are staffed by faculty members whose time is bought from departments with grant funds.

3. Other groups involved in STS studies: Program in Science, Technology, and Public Policy; Man Series (program terminated but some courses will continue). These program coexist on a cordial basis and many of Science & Culture faculty members participate in one or more of these programs.

CURRICULUM

1. Priority is given to teaching. However, with a recent major grant a scholarly and research dimension is being created within the program.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and, to a very limited degree, with non-interacting guest lecturers.

3. Courses jointly sponsored by departments, with the exception of 2 special seminars sponsored by the school.

4. Approximate percent of courses generally:

a. problem oriented	20%
b. systemic/synoptic/descriptive, etc. in approach	80%

5. The Science & Culture committee (about 6 members) plans and approves new courses and passes on the acceptability of various departmental courses as electives for program majors.

CONSTITUENCY

1. Students taking courses.

-- 5% graduates
95% undergraduates

--approximate % from:

agriculture and life sciences	10%
business and public administration	5%
engineering	10%
humanities	30%
physical sciences	10%
social sciences	35%

--educational and/or career objectives: a great variety, but a majority of program graduates have gravitated into 3 areas: urban and regional planning, science writing, and law.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	20%
engineering	10%
humanities	30%
physical sciences	10%
social sciences	30%

--appointment and promotion of faculty is by regular department.

1100-p02

PROGRAM IN SCIENCE, TECHNOLOGY & PUBLIC POLICY (STPP)

Purdue University
Department of Political Science
Lafayette, IN 47907

Dr. Joseph Haberer, Director
317/494-1222

HISTORY

1. STPP began around 1970, through grants from the NSF and NASA.

2. Objectives: emphasis is directed toward creating an awareness of the interplay between political decision making and the impact of science and technology with society. The program is designed to achieve 3 objectives: (1) program for graduate students working toward an M.A.; (2) creating group of researchers who may begin work on the substantive problems of science policy; and (3) training college and university professors who will teach courses in science and public policy.

DEGREES OFFERED

1. Graduate: M.A., Ph.D.

2. A complementary, substantial program in Public Policy & Public Administration is in the planning stage. Four additional public policy faculty are being recruited.

FUNDING

1. % of total budget from outside sources 10%
   % of total budget from institution 90%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. STPP is under the jurisdiction of the Department of Political Science.

2. Relationship with traditional departments: lodged within such a department, and works with other such departments in the university where appropriate.

3. Other groups involved in STS studies: Science & Culture Program, Man Series (program terminated but some courses will continue). STPP is heavily involved in courses and other activities of these programs.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. A very loose committee of STPP faculty members plans and approves courses.

CONSTITUENCY

1. Students taking courses.

--20% graduates
80% undergraduates

--approximate % from:

agriculture and life sciences	15%
business and public administration	5%
engineering	25%
humanities	15%
physical sciences	10%
social sciences	25%

--educational and/or career objectives: positions in federal agencies involved in formulation and administration of science policy.

2. Faculty teaching program-sponsored courses.

--100% from humanities and social sciences

--appointment and promotion of faculty is by regular department.

CENTER FOR TECHNOLOGY ASSESSMENT & POLICY STUDIES (CTAPS)
Rose-Hulman Institute of Technology
Terre Haute, IN 47803

Dr. AT Roper, Director
812/877-1511

HISTORY

1. CTAPS was formed at Rose-Hulman in the fall of 1973. Initial efforts of the center were funded by a $25,000 grant from the Lilly Endowment, Inc., and in 1975 Lilly granted an additional $100,000 to extend its activities. Additional support has come from the Shell Oil Corporation through its Shell Assists Program.

2. Objectives: to incorporate an appreciation for the complex interrelationships of technology and society in the academic curriculum, and to provide faculty and students with real-life experience in technology assessment.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 95%
   % of total budget from institution 5%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. CTAPS course work is offered under the Mechanical Engineering Department. Funding and other activities, however, are independent.

2. Relationship with traditional departments: the technology assessment class offered in-house is sponsored under the Mechanical Engineering Department number. The Rose-Hulman students enrolled in the multi-institutional technology assessment offering register under a general purpose Mechanical Engineering course number, while those at other institutions enroll under course numbers sponsored by departments at their individual institutions. Staff members of CTAPS have appointments in the various traditional departments. In addition, CTAPS has access on an ad hoc basis to staff members from all departments at Rose-Hulman.

3. Other groups involved in STS studies: Division of Humanities, Social, & Life Sciences. CTAPS cooperates with this division.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. The school-wide curriculum committee is responsible for all courses offered for credit at Rose-Hulman.

CONSTITUENCY

[The information below is given for both the in-house technology assessment course (I) and the multi-institutional technology assessment course (M), which is offered with Indiana State University, DePauw University, and Indiana University.]

1. Students taking courses.

	I	M
--graduate	0%	40%
undergraduate	100%	60%

		I	M
--approximate % from:	agriculture and life sciences	0%	3%
	business and public administration	0%	25%
	engineering	95%	45%
	humanities	0%	2%
	physical sciences	5%	5%
	social sciences	0%	20%

--educational and/or career objectives: engineering students primarily oriented toward private enterprise industrial concerns; public policy oriented toward government positions.

2. Faculty teaching program-sponsored courses.

		I	M
--approximate % from:	business and public administration	0%	9%
	engineering	40%	19%
	humanities	20%	9%
	physical sciences	0%	9%
	social sciences	40%	54%

--appointment and promotion of faculty is by regular department.

IOWA

1180-p01

PROGRAM ON HISTORY OF SCIENCE & TECHNOLOGY
Iowa State University
Ames, IA 50010

Dr. Louis Geiger, Director
515/294-7266

HISTORY

1. Eugene Ferguson, Department of Mechanical Engineering, began the program in History of Technology as courses in Mechanical Engineering during the 1950's. Later, in the early 1960's, John Greene was added to the History Department to teach History of Science. When he and Ferguson left, the program began to merge, with a joint appointment (History in Mechanical Engineering and History) in History of Technology and a position in History in History of Science. The present incumbents are Harold I Sharlin, professor of History of Science, and David B Wilson, professor of History of Science and Technology.

2. Objectives: earlier the program, if it can be called that, was largely oriented toward upperclass students, graduate students (few came to this), and engineering students as orientation (History of Technology). Now moving to development of an integrated program beginning with the offering of freshman courses, and expecting to add such history courses in special science disciplines that meet the requirements of history courses taught by professional historians.

DEGREES OFFERED

1. Undergraduate: B.A.

   Graduate: M.A.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of a department (3/4 in History, 1/4 in Mechanical Engineering).

2. Relationship with traditional departments: integrated into the programs of (1) primarily the Department of History, (2) secondarily into the College of Engineering, and (3) to a minor degree with the Department of Physics--one freshman level joint-taught course.

3. Other groups involved in STS studies: an interdisciplinary graduate program; there is cooperation between faculty members in these programs.

CURRICULUM

1. Priority is given to teaching and research.

2. Some teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   -- 1% graduates
   99% undergraduates

   --students are in the following fields:

   agriculture and life sciences
   engineering
   physical sciences

2. Faculty teaching program-sponsored courses.

   --appointment and promotion of faculty is by regular department.

1180-p02

PROGRAM ON TECHNOLOGY & SOCIAL CHANGE IN FOREIGN CULTURES (TSCFC)
Iowa State University
213 Coover Hall
Ames, IA 50010

Dr. AA Fouad, Director
515/294-2523

HISTORY

1. In 1969, a written document on the "Role of Iowa State University in International Programs" identified the problem of the transfer of technology and its interaction with the social systems as a major issue of our time receiving little attention in the academic world. In response to one of the report recommendations, TSCFC was initiated in 1972 with the aid of a 2-year grant from the Office of Education (USDHEW).

2. Objectives:

   a. to create awareness within the Iowa State University community of the interrelationships between science and technology on the one hand and social change on the other. The issues of interest are related to situations when technology is transferred across national boundaries.

95

b. the main thrust of the effort was to be the initiation of scholarly activities to explore these interrelationships.

c. to establish a graduate minor in "Technology & Social Change."

DEGREES OFFERED

1. Graduate: Interdepartmental Graduate Minor on Technology & Social Change offered at master's and Ph.D. levels.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. TSCFC is under the Interdisciplinary Council, comprised of the deans of all the colleges in the university.

2. Relationship with traditional departments: offers its courses under University Studies and uses an interdisciplinary approach to the complex issues of technology transfer. These courses, which span the boundaries of many disciplines, include faculty and students from: (1) technological disciplines, (2) social sciences, and (3) humanities. About 20 faculty members from traditional departments in 6 colleges on campus have been involved. Many have devoted between 15-25% of their time during the academic period to the program. It is not the intention of the program to compete with courses offered by traditional departments. Instead, the program courses are designed to stimulate interaction and communication between departments. In the Technology & Social Change minor program, students can choose from approximately 150 approved courses offered by 20 departments with the objective of broadening their understanding of the technology transfer issues.

3. Other groups involved in STS studies: Program on History of Science & Technology, Program on Environmental Studies, Institute of World Affairs, World Food Institute, Council on International Programs. From the start, TSCFC has worked closely with other Iowa State University programs in international studies and with efforts related to technology and society. Cooperative efforts were undertaken with the University Committee on Lectures, the Institute of World Affairs, the Engineering Seminar Committee, and several academic departments of the university.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines; in the past, utilized non-interacting guest lecturers.

3. Courses jointly sponsored by University Studies.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. An administrative committee of faculty, students, and administrators carries on day-to-day planning of courses. Large steering committee with representatives from all the colleges sets general policies and approves administrative committee's plans for courses which are sent to the academic dean.

CONSTITUENCY

1. Students taking courses.

--90% graduates
  10% undergraduates (seniors)

--approximate % from:		
	agriculture and life sciences	10%
	engineering	30%
	humanities	30%
	social sciences	30%

--educational and/or career objectives: most will pursue careers in their own specialized area of study with a better understanding of the importance of communications between disciplines.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	agriculture and life sciences	10%
	engineering	25%
	humanities	15%
	social sciences	50%

--appointment and promotion of faculty is by regular department.

LOUISIANA

1340-p01

TULANE PROGRAM ON SCIENCE, TECHNOLOGY & MAN (STM)
Tulane University
New Orleans, LA 70118

Dr. Roland H Ebel & Dr. Henry F Hrubecky, Directors
504/865-6176

HISTORY

1. STM was begun in 1968 by Professor George Webb, who invited students and selected faculty to meet and discuss topics having to do with the impact of technology upon society. By 1969 the School of Engineering was offering half-unit colloquia for undergraduates in both engineering and liberal arts, each of which was staffed jointly by a professor in engineering, or one of the hard sciences, and a professor from the humanities or social sciences. Since that time the program has grown to a total of 12 courses and is also involved in (1) sponsoring conferences on the social impact of technology for community groups, (2) research, and (3) publication.

2. Objectives:

   a. to provide interdisciplinary courses for engineering and liberal arts students on interrelationships between technical and human problems.

   b. to encourage interdisciplinary research by the faculty on problems involving the interface between technology and the society generally, and technological assessment specifically.

   c. to encourage and facilitate community discussion of issues posed by exploding technology.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 98%
   % of total budget from institution 2%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%*

   *the Public Understanding of Technology Program is entirely funded by NSF; the on-campus academic program receives only a few dollars of university support.

INSTITUTIONAL ARRANGEMENTS

1. STM is under the jurisdiction of the School of Engineering.

2. Relationship with traditional departments: faculty are based within regular departments. STM is coordinated by 2 co-directors: one from the School of Engineering and one, a political scientist, holds an adjunct appointment in the School of Engineering.

3. Other groups involved in STS studies: Public Understanding of Technology Program, Technology Assessment Program. STM administers these programs.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 40%
   b. systemic/synoptic/descriptive, etc. in approach 60%

5. Curriculum is approved jointly by the School of Engineering, Newcomb College (women's division), and the College of Arts & Sciences (men's division).

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --approximate % from:

engineering	40%
humanities	20%
social sciences	40%

   --educational and/or career objectives: as varied as the interests of the normal student body.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

engineering	40%
humanities	25%
physical sciences and life sciences	10%
social sciences	25%

   --appointment and promotion of faculty is by regular department.

MARYLAND

1420-p01

COMMITTEE ON THE HISTORY & PHILOSOPHY OF SCIENCE (CHPS)
University of Maryland
1131 Skinner Hall
College Park, MD 20742

Dr. Frederick Suppe, Chairperson
301/454-4103

HISTORY

1. CHPS was formed in 1975 by the Departments of History and Philosophy.

2. Objectives:

   a. to offer coordinated instruction and supervise research in a wide range of subjects, with special emphasis on the integration of historical and philosophical approaches to the study of physical, biological, and social science.

   b. to offer a series of undergraduate courses and curricula of graduate study in the history and philosophy of science.

DEGREES OFFERED

1. Graduate: graduate students in the history and philosophy of science are affiliated with the Department of History or the Department of Philosophy and receive graduate degrees (Ph.D. and M.A.) from the affiliated department under the supervision of CHPS. CHPS will also direct graduate minors.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. CHPS is under the jurisdiction of the Departments of History and Philosophy.

2. Relationship with traditional departments: students participating in CHPS activities are affiliated with traditional departments. Faculty whose teaching and research interests are related to the history and philosophy of science comprise a Scientific Advisory Committee.

CURRICULUM

1. Priority is given to teaching and research.

CONSTITUENCY

1. Faculty teaching program-sponsored courses.

   --100% from humanities

   --appointment and promotion of faculty is by regular department.

1420-p02

PHILOSOPHICAL ISSUES IN PUBLIC POLICY (PIPP)
University of Maryland
College Park, MD 20742

Dr. Samuel Gorovitz, Director
301/454-2852

HISTORY

1. PIPP began with a planning grant from NEH ($30,000).

2. Objective: curriculum development project.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 75%
   % of total budget from institution 25%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. PIPP is under the jurisdiction of a department.

2. Relationship with traditional departments: largely within Philosophy Department; participation from Departments of Government and Politics; some participation from Economics Department.

CURRICULUM

1. Priority is given to teaching.
2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.
3. Courses jointly sponsored by departments.
4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--10% graduates
90% undergraduates

--approximate % from:	business and public administration	25%
	humanities	25%
	physical sciences	25%
	social sciences	25%

--educational and/or career objectives: diverse.

2. Faculty teaching program-sponsored courses.

--approximate % from:	humanities	80%
	social sciences	20%

--appointment and promotion of faculty is by regular department.

MASSACHUSETTS

1440-p01

SOCIETY & TECHNOLOGY (ST)
Babson College
Babson Park, MA 02157

Dr. Robert M McKeon, Director
617/235-1200 ext. 346

HISTORY

1. In 1970, the chairman of the Liberal Arts Division held on-going discussions focusing on the place of liberal arts in a school of management. Out of these discussions grew the concept of offering courses in the area of society and technology, one of critical

importance for future managers who need to understand the world in which they will practice their art. An interdisciplinary faculty committee was formed to set up the program, draw up the course offerings, get faculty approval for them, and find a director for the program. In the spring of 1972 a director was found and in the fall of 1972 the program entered into full swing.

2. Objective: provide background, perspective, and analytical approaches necessary for citizens and managers to cope effectively with technology.

DEGREES OFFERED

1. Undergraduate: B.A.*

   *a student may concentrate in Society & Technology by taking 5 courses. In doing so, ones degree will indicate a major in Society & Technology.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. ST is a separate department within the Liberal Arts Division.

2. Relationship with traditional departments: one person works full time in the program; others who teach in the program receive release time from their departments.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	100%

5. A Committee on Society & Technology reviews courses before they are presented to the college's curriculum committee.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --100% from business and public administration

   --educational and/or career objectives: business and public administration.

2. Faculty teaching program-sponsored courses.

--approximate % from:	humanities	12.5%
	physical sciences	12.5%
	social sciences	62.5%
	other	12.5%

--appointment and promotion of faculty is by program and regular department.

1450-p01

CENTER FOR PHILOSOPHY & HISTORY OF SCIENCE (PHS)
Boston University
Boston, MA 02215

Dr. Robert S Cohen, Director
617/353-2604, -2605

HISTORY

1. PHS began in 1960 with faculty initiation of the inter-university Boston Colloquium for the Philosophy of Science, which is still continuing; later added conferences and curriculum suggestions to departments, a separate logic colloquium, and an institute of relativity studies. Activities of the center are cosponsored by several departments, including philosophy, physics, mathematics, history, and biology; there is cooperation as projects require it from sociology, anthropology, economics, medicine, religion, and psychology. There is substantial effort with visiting scholars from the US and foreign countries for research and teaching. Initial support was from the NSF.

2. Objectives: to stimulate interdisciplinary thinking about historical, foundational, and social aspects of the natural and social sciences, including among non-university scientists in industry, government, and schools; to bring together such persons from the many colleges and universities in greater Boston and beyond; to bring these efforts also to Boston University students through center activities and by stimulating new courses; to stimulate publications (mainly Boston Studies in the Philosophy of Science, as it turned out) in the field.

DEGREES OFFERED

1. Undergraduate: B.A. is offered through departmental majors or through parallel advisory committee of the College of Liberal Arts faculty on History & Philosophy of Science.

   Graduate: both philosophy and physics offer orthodox degrees (M.A., Ph.D.) with dissertation topics in history and philosophy of science; also, the Graduate Faculty has special program supervised by a Committee on Philosophy & History of Science.

2. The Graduate Committee on Philosophy & History of Science now anticipates a special effort at Ph.D. or certificate degrees for scientists and medical doctors who wish a year or more of formal advanced work in history and philosophy of science, medicine and technology, including social aspects.

FUNDING

1. There is minimal outside funding received directly by the center. It appears mainly through individual faculty research grants and is accounted for through the faculty's departmental bases.

   % of total budget from outside sources 15%
   % of total budget from institution 85%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%*

   *originally government funding was about 70% (1960-65)

INSTITUTIONAL ARRANGEMENTS

1. PHS is administratively within the Graduate School; functionally it is autonomous.

2. Relationship with traditional departments: often, but not always, cosponsors programs with departments. All PHS faculty must have departmental bases for their appointments; research associates need not have departmental appointments but most do. The center budget does not support any portion of faculty salaries. Faculty core of the center varies, but comprises usually 7 or 8; another 15 or so are more loosely associated. There are no formal student degrees awarded through PHS as such, but a parallel faculty committee supervises student programs in history and philosophy of science, technology, and medicine; this is a small effort thus far but is in the process of expansion in 1976.

3. Other groups involved in STS studies: Center for Energy Studies, Center for Law & Health Sciences; aspects of Center for Latin-American Development Studies and of African Studies. There is occasional collaboration in programs, colloquia, etc. between these programs and PHS; no formal relation but close cooperation between colleagues.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and, occasionally, with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 50%
   b. systemic/synoptic/descriptive, etc. in approach 50%

5. There is a coordinating committee which calls in colleagues and stimulates rather than supervises. It reports to the faculty's academic policy committee on all teaching and degree proposals in the field, and it coordinates with departments as needed (often important).

CONSTITUENCY

1. Students taking courses.

   --20% graduates
   80% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   humanities
   physical sciences
   social sciences
   agriculture and life sciences
   engineering
   communication/education

   --educational and/or career objectives: impossible to generalize but largely career-related.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

humanities	40%
life sciences	10%
physical sciences	30%
social sciences	20%

   --appointment and promotion of faculty is by regular department.

1450-p02

PHYSICS (INTERDISCIPLINARY)

Boston University
Boston, MA 02215

Dr. George O Zimmerman, Director
617/353-2623

HISTORY

1. The program was created in the late 1960's in response to student demand.

2. Objective: to acquaint students with physics in an alternate context.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the Physics Department.

2. Relationship with traditional departments: same faculty.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing non-interacting guest lecturers.

3. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 100%

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   -- 5% graduates
   95% undergraduates

   --approximate % from: humanities 50%
   social sciences 50%

2. Faculty teaching program-sponsored courses.

   --100% from physical sciences

   --appointment and promotion of faculty is by regular department.

1450-p03

SCIENCE COMMUNICATION PROGRAM (SC)
Boston University
640 Commonwealth Ave.
Boston, MA 02215

Dr. Harold G Buchbinder, Director
617/353-3470

HISTORY

1. SC was started in September 1967 by DM White, Chairman of the Journalism Department, and G Wiebe, Dean of the School of Public Communication.

2. Objectives: provide students with both the background to understand the difficult developments in the different fields of science and the ability to communicate effectively about them. School of Public Communication felt there would be a need for science reporters in print and electronic media. Original approach was to select only those students with undergraduate degrees in science or engineering.

DEGREES OFFERED

1. Graduate: M.S.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. SC is under the jurisdiction of the School of Public Communication.
2. Relationship with traditional departments: students may elect graduate level courses in science, public relations, or journalism in any of the other schools.

CURRICULUM

1. Priority is given to teaching.
2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing non-interacting guest lecturers.
3. Approximate percent of courses generally:

a.	problem oriented	40%
b.	systemic/synoptic/descriptive, etc. in approach	20%
c.	combination of a and b	40%

4. SC staff serves as curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--100% graduates

--approximate % from:	biology and chemistry	75%
	engineering	5%
	social sciences	20%

--educational and/or career objectives: most want to be science writers for newspapers, magazines, book publishers, research institutes, museums, aquariums, television.

2. Faculty teaching program-sponsored courses.

--approximate % from:	engineering	10%
	journalism	40%
	physical sciences	50%

--appointment and promotion of faculty is by program.

1460-p01

CENTER FOR LAW & HEALTH SCIENCES (LHS)
Boston University School of Law
209 Bay State Rd.
Boston, MA 02215

Dr. George J Annas, Director
617/353-2910

HISTORY

1. LHS was established in 1970 as the successor to the Boston University Law-Medicine Institute. It was founded in response to a growing interest in the interface between the professions of medicine and law.

2. Objectives: to develop programs in interdisciplinary education and research in the health field. The programs of the center approach the resolution of health problems from a broad, interdisciplinary perspective and involve the active participation of faculty and students from a variety of disciplines and all the leading educational institutions in the Boston area.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 55%
   % of total budget from institution 45%

2. % of outside funds from private foundations 50%
   % of outside funds from government agencies 50%

INSTITUTIONAL ARRANGEMENTS

1. LHS is under the jurisdiction of the School of Law.

2. Relationship with traditional departments: students, faculty, and researchers are drawn from all areas of Boston University and a large number are drawn from other Boston area universities.

3. Other groups involved in STS studies: Department of Socio-Medical Sciences, School of Medicine. LHS works with this department on a number of ethical issues, and faculty act as instructors in their seminars on Law & Medicine. In the future hope to collaborate on a number of research projects.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:
   a. problem oriented 100%
   b. systemic/synoptic/descriptive, etc. in approach 0%

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --student distribution by field (listed in decreasing numerical order):

   law
   social sciences
   humanities

   --educational and/or career objectives: law, psychology, medicine, nursing, education, philosophy, management, social work.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

agriculture and life sciences	10%
law	60%
medicine	15%
social sciences	15%

   --appointment and promotion of faculty is by program.

1510-p01

ENVIRONMENTAL AFFAIRS (EA)
Clark University
Worcester, MA 01610

Dr. Harry Schwarz, Director
617/793-7375

HISTORY

1. EA began in 1974. It grew out of the policy of the university to develop appropriate interdisciplinary B.A./M.A. programs. In 1972 a semester-long faculty seminar, bringing together members of the School of Geography and of the Departments of Physics, Economics, and Biology served as the initial step to development of the program's specific outline and direction.

2. Objectives:

   a. to train persons for entry-level professional positions in the fields of environmental planning, management, and education.

   b. to serve as a focal point for interdisciplinary research on environmental and related problems.

   c. to provide community service through faculty and student involvement in areas of environmental concerns.

DEGREES OFFERED

1. Undergraduate: concentration in EA can be achieved as a self-designed major.

   Graduate: M.A. Ph.D. work can be accomplished in the environmental field through the School of Geography.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. EA is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: faculty from various departments serve on the Environmental Program Committee and teach environmental courses. EA cosponsors courses with traditional departments and draws its students from all of them. Undergraduates (juniors and seniors) are encouraged to maintain a departmental undergraduate major within the program.

3. Other groups involved in STS studies: Science, Technology, & Society Program; International Development Program. Close liaison is maintained between these programs and EA, including interlocking program committees and joint courses and projects.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting quest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	50%
c. combination of a and b	25%

5. There is a program committee with an interdisciplinary makeup. Academic Board approval is needed for all courses.

CONSTITUENCY

1. Students taking courses.

--20% graduates
80% undergraduates

--approximate % from:

agriculture and life sciences	10%
engineering	5%
physical sciences	27%
social sciences	58%

--educational and/or career objectives: very varied. Work in environmental agencies or environmental interest groups is most often mentioned.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	12%
physical sciences	25%
social sciences	63%

--appointment and promotion of faculty is by regular department.

1510-p02

SCIENCE, TECHNOLOGY & SOCIETY (STS)
Clark University
Worcester, MA 01610

Dr. Christoph Hohenemser, Director
617/793-7175

HISTORY

1. In the fall of 1971, at a retreat of the Department of Physics (6 full-time staff positions), the consequences of declining relevance of physics to most undergraduates were discussed. Out of this grew the realization that a redefinition of the traditional role of a physics department in a faculty of arts and sciences was in order. Extending the concerns of the department seemed essential. The choice of work in the assessment of science and technology in a current social context appeared a natural one since one of the faculty members had already done substantial studies in this area. Following through on this choice led to the present program (an undergraduate major) with its several collaborative links to the social sciences and allied natural sciences.

2. Objectives: a program of interdisciplinary study with emphasis on the assessment of science and technology in a social and political context. The goal of the program is to train individuals who are able to deal with policy questions on the use and misuse of science and technology, and who do so with the short and long range limitations of the natural environment in mind. Although science and social science are both important to the goals of the program, major requirements in the program do not give equal weight to both, but emphasize achieving literacy in science. The most essential feature of the program is several problem oriented courses involving team teaching of 2 or more faculty.

DEGREES OFFERED

1. Undergraduate: B.A.

2. Currently planning the offering of an M.A. program in technology assessment, to be offered jointly with Worcester Polytechnic Institute, an engineering school 1 mile from Clark University.

FUNDING

1.	% of total budget from outside sources	50%
	% of total budget from institution	50%
2.	% of outside funds from private foundations	80%
	% of outside funds from government agencies	20%

INSTITUTIONAL ARRANGEMENTS

1. STS is run by an interdepartmental program committee. The chairman reports to the president.

2. Relationship with traditional departments: originally, the program was planned and founded by the Physics Department. At present, Physics is still the dominant contributor, but other departments, such as Geography, also make strong contributions. So far one program position has been funded by extramural sources independent of departments; all other contributions in teaching and research have come through departments.

3. Other groups involved in STS studies: International Development Program, Environmental Affairs. There are friendly relations between these programs and STS. Environmental Affairs and STS share a joint introductory course this year for the first time. Environmental Affairs and International Development both emphasize social science approaches to problem solving, and hence do not compete very much with the science-based STS program.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	100%
b. systemic/synoptic/descriptive, etc. in approach	0%

5. The Program Committee acts as its own curriculum committee.

CONSTITUENCY

1. Students taking courses.

--10% graduates
90% undergraduates

--approximate % from:

agriculture and life sciences	20%
humanities	10%
physical sciences	20%
social sciences	20%
undecided majors	30%

--educational and/or career objectives: of those whose career objectives are known, there are the following groups: (1) graduate work in environmental science; (2) graduate work in environmental management; (3) teaching.

2. Faculty teaching program-sponsored courses.

--approximate % from:	agriculture and life sciences	20%
	physical sciences	50%
	social sciences	30%

--appointment and promotion of faculty is by program and regular department.

1550-p01

ENVIRONMENTAL SCIENCE & PUBLIC POLICY (ESPP)

Hampshire College
Amherst, MA 01002

Dr. Allan Krass & Dr. Louis Wilcox, Directors

HISTORY

1. ESPP began in September 1975 as the result of the merger of 2 previous programs: Environmental Quality and Science & Public Policy.

2. Objective: interdisciplinary teaching and research involving undergraduates. Study local problems of environmental policy making.

DEGREES OFFERED

1. Undergraduate: B.S.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. Jurisdiction of the program has not yet been decided.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Approximate percent of courses generally:

a.	problem oriented	25%
b.	systemic/synoptic/descriptive, etc. in approach	75%

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:		
	agriculture and life sciences	20%
	humanities	10%
	physical sciences	10%
	social sciences	60%

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	agriculture and life sciences	30%
	physical sciences	50%
	social sciences	20%

--appointment and promotion of faculty is by regular department.

1560-p01

KENNEDY INTERFACULTY PROGRAM IN MEDICAL ETHICS (KIP)

Harvard University
677 Huntington Ave.
Boston, MA 02115

Dr. William J Curran, Director
617/734-3300

HISTORY

1. KIP began in 1972 with a grant from the NEH and matching support from the Joseph P Kennedy, Jr. Foundation.

2. Objectives: main concern is with the development and firm installation of regular credit courses in medical ethics in key faculties and schools of Harvard University. In addition, there is a program for senior and junior fellowships in Medical Ethics, an Ethical Rounds Program in teaching hospitals, and the program is involved in the collection and development of case studies in the medical ethical areas for use in the teaching of medical ethics.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 100%
   % of total budget from institution 0%

2. % of outside funds from private foundations 50%
   % of outside funds from government agencies 50%

INSTITUTIONAL ARRANGEMENTS

1. KIP is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: courses are offered through departments and programs, and faculty members from traditional departments conduct these courses.

CURRICULUM

1. Priority is given to teaching and research.
2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.
3. Courses jointly sponsored by departments and other programs.

CONSTITUENCY

1. Students taking courses.

   --student distribution by field (listed in decreasing numerical order):

   agriculture and life sciences
   humanities
   other

   --educational and/or career objectives: many fellows have gone directly into positions of teaching or administration involving medical ethics.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	humanities	50%
	law	25%
	medicine	25%

   --appointment and promotion of faculty is by regular department.

1560-p02

PROGRAM FOR SCIENCE & INTERNATIONAL AFFAIRS (PSIA)
Harvard University
9 Divinity Ave.
Cambridge, MA 02138

Dr. Paul Doty, Director
617/495-1554

HISTORY

1. PSIA began in July 1973 with a 7-year grant from the Ford Foundation.
2. Objective: study and understanding of arms control and disarmament and the part these can play in reducing the dependence on force in world politics.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.	% of total budget from outside sources	100%
	% of total budget from institution	0%
2.	% of outside funds from private foundations	100%
	% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. PSIA is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: several members of the program hold teaching appointments in departments (e.g., government, public policy, engineering and applied physics, biochemistry), and the graduate students supported by the program work toward degrees in departments.

3. Other groups involved in STS studies: Center for Energy & Environmental Policy, Seminar on Science & Public Policy. There is an informal relation between these programs and PSIA.

CURRICULUM

1. Priority is given to research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and some with non-interacting guest lecturers.

3. Courses jointly sponsored by the General Education Division.

4. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	25%
c. combination of a and b	50%

5. There is a committee within the General Education Division for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --15% graduates
     85% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   social sciences
   business and public administration
   physical sciences
   humanities

   --educational and/or career objectives: diverse objectives characteristic of Harvard students.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

business and public administration	20%
engineering	20%
physical sciences	20%
social sciences	40%

   --appointment and promotion of faculty is by program for research appointments; by regular departments for academic appointments.

1560-p03

PROGRAM ON INFORMATION TECHNOLOGIES & PUBLIC POLICY (PITPP)
Harvard University
200 Aiken Computation Laboratory
Cambridge, MA 02138

Dr. Anthony G Oettinger & John C LeGates, Directors
617/495-3986 617/495-3929

HISTORY
1. PITPP was established in February 1972.
2. Objective: develop an understanding of information systems and information technologies and use that understanding to illuminate public discussion of information policy.

DEGREES OFFERED
1. No degrees offered.

FUNDING
1. % of total budget from outside sources 85%
   % of total budget from institution 15%
2. % of outside funds from private foundations 80%
   % of outside funds from government agencies 20%

INSTITUTIONAL ARRANGEMENTS
1. PITPP is autonomous/independent/intercollegiate.
2. Relationship with traditional departments: research drafts are reviewed by members of the relevant departments.

CURRICULUM
1. Priority is given to research.
2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.
3. Courses jointly sponsored by departments.
4. Approximate percent of courses generally:
   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%
5. A departmental committee plans and approves courses.

CONSTITUENCY
1. Students taking courses.
   --50% graduates
   50% undergraduates

--students are about equally distributed among the following fields:

business and public administration
engineering
humanities
law
physical sciences
social sciences

--educational and/or career objectives: no pattern.

2. Faculty teaching program-sponsored courses.

--approximate % from: business and public administration 50%
the remaining 50% are from the following fields:

engineering
humanities
law
physical sciences
social sciences

--appointment and promotion of faculty is by regular department.

1560-p04

PROGRAM ON PUBLIC CONCEPTIONS OF SCIENCE (PCS)
Harvard University
Cambridge, MA 02138

Dr. Vivien Shelanski, Director
617/495-4496

HISTORY

1. PCS began in 1972, through the efforts of Dr. Gerald Holton, in order to foster research, and to serve as a clearinghouse for those doing research, on the state of the public understanding of sciences.

2. Objectives: research and publication focusing on the ethical implications of science, medicine, and technology, and the perceptions of these implications by the public. To facilitate communications (through publication of a quarterly Newsletter) among persons engaged in research and teaching on these issues.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 100%
% of total budget from institution 0%

2. Proportion of outside funds from private foundations to those from government agencies varies from year to year; most from government agencies.

INSTITUTIONAL ARRANGEMENTS

1. PCS is autonomous/independent/intercollegiate.

CURRICULUM

1. Priority is given to research.

1570-p01

ENERGY LABORATORY (EL)
Massachusetts Institute of Technology
Room E40-133
Cambridge, MA 02139

Dr. David C White, Director
617/253-3405

HISTORY

1. EL began in November 1972. It grew out of MIT's history of public service and its many contributions in the energy field coupled with the desire of various academic departments to strengthen and expand energy research and education at MIT.

2. Objectives:

   a. undertake broad-based, intensive program of interdisciplinary and mission-oriented energy research.

   b. conduct comprehensive and objective policy studies and assessments of alternate energy strategies.

   c. communicate research results to potential users and promote the transfer of new technologies and methodologies into practice.

   d. expand educational and training opportunities in energy areas at MIT and develop the manpower with the skills and experience necessary to deal with energy problems.

   e. contribute to public dissemination of energy-related data and the furtherance of informed dialogue on key energy issues.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 95%
   % of total budget from institution 5%

2. % of outside funds from private foundations 33%
   % of outside funds from government agencies 67%

INSTITUTIONAL ARRANGEMENTS

1. EL is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: members of the EL staff work with and through the various academic departments at MIT in developing relevant energy-related subject matter, curricula, and thesis-oriented research. Over 45 EL staff and 55 faculty from numerous MIT departments, laboratories, and centers are involved in projects of the EL.

CURRICULUM

1. Priority is given to research. Although no formal courses are given by the laboratory, students do thesis research under the supervision of faculty members in the EL.

CONSTITUENCY

1. Students doing thesis research.

   --90% graduates
   10% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   engineering
   business and public administration
   social sciences (economics)

2. Faculty involved in EL activities.

   --appointment and promotion of faculty is by regular department.

1570-p02

PROGRAM IN SCIENCE, TECHNOLOGY & PUBLIC POLICY (STPP)
Massachusetts Institute of Technology
E53-473
Cambridge, MA 02139

Dr. Eugene B Skolnikoff, Director
617/253-3140

HISTORY

1. Early in the 1960's, the Political Science Department decided to develop a teaching and research program in Science & Public Policy, in part to capitalize on the extensive interest and experience of MIT on interactions of science and technology with public policy issues.

2. Objectives: within Political Science, the objectives were to develop a research and teaching program for graduates and undergraduates. In research, interaction with other disciplines and faculty is integral. Related programs have emerged in the School of Engineering for an S.M. program for engineers interested in the interaction of their work with public affairs. The Technology Studies Program is aimed at undergraduate teaching and developing courses relating science and technology to society.

DEGREES OFFERED

1. Undergraduate: B.S.

   Graduate: M.S., Ph.D.

FUNDING

1. Outside funding is received.

INSTITUTIONAL ARRANGEMENTS

1. STPP is under the jurisdiction of the Political Science Department.

2. Relationship with traditional departments: draws from them--both students and faculty.

3. Other groups involved in STS studies: Technology Studies, Technology & Public Policy. These groups are complementary to STPP. In some cases there is joint teaching among the programs.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	20%
b. systemic/synoptic/descriptive, etc. in approach	30%
c. combination of a and b	50%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --50% graduates
   50% undergraduates

   --approximate % from:

agriculture and life sciences	5%
business and public administration	10%
engineering	20%
humanities	5%
physical sciences	10%
social sciences	50%

   --educational and/or career objectives: engineering, academic, government.

2. Faculty teaching program-sponsored courses.

   --appointment and promotion of faculty is by program.

1570-p03

TECHNOLOGY ADAPTATION PROGRAM (TAP)

Massachusetts Institute of Technology
Cambridge, MA 02139

Dr. Fred Mozvenzadeh, Director
617/525-7178

HISTORY

1. TAP began in August 1971, under a grant from the US Department of State through the Agency for International Development.

2. Objectives:

   a. to develop an understanding of the kinds and characteristics of technologies that are appropriate to countries of regions in various early stages of industrial development, particularly those countries in which the factors of production have relative values different from those of developed nations.

   b. to identify the skills and criteria required to select and adapt technologies appropriate to the developing countries. To examine the techniques for strengthening these skills, including technical education and appropriate design of products, processes, and plants suited to the conditions.

   c. to develop an understanding of the processes by which technological and managerial knowledge and skills can be effectively introduced, disseminated, and used in developing countries, including an understanding of cultural impediments and the obstacles to technological development that have been encountered in the past, and developing methods of improving the transfer and diffusion rates.

   d. to examine, at the national and enterprise levels, the long-term and short-term economic and social advantages and disadvantages of importing rather than establishing indigenous manufacturing technology as these relate to technology for local conditions and needs or devising appropriate new technical solutions.

   The long-term aim of MIT is to develop a broadly-based body of expertise at the Institute concerned with the exploitation of technology for public works and industrial development in developing countries.

   MIT will not attempt to cover all areas of technology, but will concentrate on those which are of broad interest to both MIT and the developing countries. Examples where MIT's engineering competence seems particularly applicable are chemical processing, materials and metallurgy, power generation and transmission, machine tools and materials processing, construction, water resource development, communications and processing, and transportation. These fields constitute much of the basis for the industrialization that is emerging in the developing countries.

DEGREES OFFERED

1. No degrees offered.

2. In the process of developing a master's program to be administered by an interdepartmental committee. It will take some time to accomplish this. In the meantime, students may arrange individual programs with considerable freedom in order to accomplish their educational goals in this area.

FUNDING

1. % of total budget from outside sources 100%
   % of total budget from institution 0%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. TAP is under the jurisdiction of the Provost's Office.

2. Relationship with traditional departments: members of the faculty of a number of departments are sharing in the research. These departments include architecture, civil engineering, economics, electrical engineering, political science, aeronautics and astronautics, and urban studies and planning, among others. In addition, faculty at the Energy Laboratory and the Center for Transportation Studies are also involved.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:
   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%

5. General MIT standing Committee on Curricula and the Steering Committee of TAP plan and approve courses.

CONSTITUENCY

1. Students taking courses.

   --50% graduates
   50% undergraduates

--student distribution by field (listed in decreasing numerical order):

engineering
business and public administration
humanities
physical sciences
social sciences

--educational and/or career objectives: too varied to be meaningful.

2. Faculty teaching program-sponsored courses.

--appointment and promotion of faculty is by regular department.

1570-p04

TECHNOLOGY & CULTURE SEMINAR (TCS)

Massachusetts Institute of Technology
312 Memorial Drive
Cambridge, MA 02139

Rev. John Crocker, Jr., Director
617/253-2983

HISTORY

1. TCS began in 1971. It emerged out of the ministry of a chaplain, the commitment and interest of a wide variety of faculty, and continued support of the administration.

2. Objectives: primary functions are: (1) "faculty development" through seminars for faculty and (2) "public education" through public lectures for the whole Institute community.

   The program seeks to:

   a. raise those questions and confront those problems which transcend particular disciplines, to see that they receive disciplined analysis, study, and discussion, and to work at creating a mode of discourse by which this can be done.

   b. confront a range of issues surrounding science and technology: what they are; how they are used; the values they serve; the moral, social, political, and cultural problems to which they contribute.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 50%
   % of total budget from institution 50%

INSTITUTIONAL ARRANGEMENTS

1. TCS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: work with departments in cosponsoring programs and projects.

CONSTITUENCY

1. Students taking courses.

   --33% graduates
   33% undergraduates
   33% faculty

1570-p05

TECHNOLOGY & PUBLIC POLICY (TPP)
Massachusetts Institute of Technology
Cambridge, MA 02139

Dr. Richard de Neufville, Director
617/253-7694

HISTORY

1. TPP began in 1975.
2. Objectives: M.S. program for students who want to prepare themselves for leadership in development, use, assessment, and control of technology. Educates professionals to work in the formulation, analysis, specification, and implementation of policy in technical areas.

DEGREES OFFERED

1. Graduate: M.S.

FUNDING

1. % of total budget from outside sources 50%
   % of total budget from institution 50%
2. % of outside funds from private foundations 50%
   % of outside funds from government agencies 50%

INSTITUTIONAL ARRANGEMENTS

1. TPP is under the jurisdiction of the School of Engineering.
2. Relationship with traditional departments: cross-cutting and supportive. TPP brings together faculty and staff from all departments in the School of Engineering and the Departments of Urban Studies & Planning, Economics, Political Science, Management, and Humanities, and from the Center for Policy Alternatives.

CURRICULUM

1. Priority is given to teaching.
2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

    a. problem oriented 40%
    b. systemic/synoptic/descriptive, etc. in approach 60%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

    --100% graduates

    --student distribution by field (listed in decreasing numerical order):

        engineering
        physical sciences
        social sciences

    --educational and/or career objectives: policy analysis and formation, principally with or through governmental agencies. The focus is on doing something about problems, of building on critique toward possible solutions.

2. Faculty teaching program-sponsored courses.

    --faculty distribution by field (listed in decreasing numerical order):

        engineering
        social sciences

    --appointment and promotion of faculty is by regular department.

1570-p06

TECHNOLOGY STUDIES PROGRAM (TS)
Massachusetts Institute of Technology
Room 20D-210
Cambridge, MA 02139

Dr. Louis L Bucciarelli, Director
617/253-4061

HISTORY

1. TS began in 1973 to provide science and engineering students with humanities courses relevant to their fields.

2. Objectives:

    a. development of undergraduate subject offerings in Technology Studies.

    b. support of faculty efforts in research and teaching along these lines.

    c. development of research programs in Technology Studies.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. Outside funding is received.

INSTITUTIONAL ARRANGEMENTS

1. TS is under the jurisdiction of a school or college within MIT.
2. Relationship with traditional departments: faculty interaction in teaching and research.

CURRICULUM

1. Priority is given to teaching and research.
2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.
3. Courses jointly sponsored by departments and other programs.
4. Courses are planned and approved by a steering committee composed of faculty members representing all schools at MIT.

CONSTITUENCY

1. Students taking courses.

   --10% graduates
   90% undergraduates

--approximate % from:	engineering	40%
	humanities	5%
	life sciences	10%
	physical sciences	40%
	social sciences	5%

2. Faculty teaching program-sponsored courses.

--approximate % from:	engineering	30%
	humanities	40%
	social sciences	30%

1580-p01

LUCE PROFESSORSHIP IN COSMOLOGY

Mount Holyoke College
South Hadley, MA 01075

President David B Truman, Director
413/538-2500

HISTORY

1. The Luce Professorship is supported by a grant from the Henry Luce Foundation. Upon invitation from the foundation, faculty members in the physical and biological sciences proposed a professorship in "cosmology," a field defined for this purpose in its broadest terms. The first Luce Professor, Thomas Gold, was appointed in 1975. His first course, entitled "Scientific Conversations," is in progress.

2. Objective: focus student and faculty attention on the large question of the nature of the universe and its relationship to the nature of man, thus giving impetus to integration of the sciences and humanities.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 100%
   % of total budget from institution 0%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. The program is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: it is independent of traditional departments in order to encourage interdepartmental interaction and integration of the sciences and humanities.

3. Other groups involved in STS studies: the Program for the Study of Complex Organizations includes a course on "The Relation of Complex Organizations to the Extension of Scientific Knowledge and Technological Change." There is no formal connection between the 2 programs, although informal communication is easily accomplished.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses are interdisciplinary; they are not sponsored by departments or other programs.

4. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%

5. There is no formal curriculum committee; course plans are made by general consultation among faculty members and departments.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   social sciences
   life sciences
   humanities
   physical sciences

   --educational and/or career objectives: extremely varied. About 30-40% of Mount Holyoke graduates enter professional or graduate schools.

2. Faculty teaching program-sponsored courses.

   --100% physical sciences (only 1 faculty member)

   --appointment and promotion of faculty is by program.

1640-p01

URBAN SOCIAL & ENVIRONMENTAL POLICY (USEP)
Tufts University
Medford, MA 02155

Dr. Hermann Field, Director
617/628-5000

HISTORY

1. USEP began in 1973. Professor Hermann Field had completed 12 years as a planner for the Tufts New England Medical Center. His experience and growing interest in the environment and community-based planning were the stimuli for his proposing a special interdisciplinary program to Tufts. The program was to emphasize the humanistic, community, and environmental side to physical and social planning. At the same time, several disciplines at the university were looking for an urban orientation and were prepared to support an interdisciplinary program.

2. Objectives: USEP was designed for people wishing to pursue careers as practitioners or for those people who already have careers and wish to raise their level of theoretical knowledge in the 5 special policy areas: health planning, physical environmental policy, transportation, community organization, and education. The curriculum is designed around 3 concepts: (1) an interdisciplinary academic background in urban related areas; (2) emphasis on a special policy area for intensive study; and (3) actual field experiences in internships and research projects.

DEGREES OFFERED

1. Graduate: M.S., M.A.

FUNDING

1.

% of total budget from outside sources	80%
% of total budget from institution	20%

2.

% of outside funds from private foundations	0%
% of outside funds from government agencies	100%

INSTITUTIONAL ARRANGEMENTS

1. USEP is under the jurisdiction of a school or college within Tufts University.

2. Relationship with traditional departments: USEP has an overseeing committee which is comprised of 1 faculty member from each of 5 departments: education, civil engineering, economics, sociology, and political science.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:

a. problem oriented	20%
b. systemic/synoptic/descriptive, etc. in approach	80%

4. The Program Faculty plans curriculum with approval from the overseeing committee and individual departments.

CONSTITUENCY

1. Students taking courses.

--100% graduates

--student distribution by field (listed in decreasing numerical order):

social sciences
humanities

--educational and/or career objectives: generally, community-based planning, health advocacy, environmental planning in government agencies or consultant firms.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	humanities	10%
	law	10%
	social sciences	80%

--appointment and promotion of faculty is by program faculty, with approval of department with which the new faculty member will be associated.

1650-p01

GLOBAL SURVIVAL FRESHMAN YEAR PROGRAM (GSFYP)
University of Massachusetts
237 Hills House North
Amherst, MA 01002

Dr. Stephen Guild, Director
413/545-3100

HISTORY

1. In 1972, the US Office of Education was soliciting proposals for new directions in international studies at American college campuses. A group of faculty from Area Studies Committee, International Programs, and School of Education developed a proposal which included a cluster of courses, development of classroom materials at the university level, and a faculty colloquium focusing on some issues of comparative, international, and global survival studies.

2. Objectives: strengthen awareness of interconnections between disciplines; develop increased awareness of complexity and depth of problems; stress alternate ways for dealing with problems; develop awareness of international concerns; develop ability to see interrelatedness of program goals.

DEGREES OFFERED

1. GSFYP is considering high level course and has begun discussions about an upper level program. However, it would not be a degree program; it might be a certificate awarding program.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. GSFYP is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: core and adjunct faculty for the program are drawn from the various departments on campus. Core faculty serve as the basic staff for the program; adjunct teach 6-week-long modules.

3. Other groups involved in STS studies: Institute for Man & Environment; some beginnings of programs which are presently colloquia: Science & Human Values, Technology & Industrial Development. GSFYP faculty and staff participate in or work closely with these additional efforts.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	75%
b. systemic/synoptic/descriptive, etc. in approach	25%

5. The program staff functions as a curriculum committee for planning and approval of courses. There is also an Advisory Committee made up of faculty from throughout the university, representing a wide spectrum of departments and interests.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

agriculture and life sciences	10%
business and public administration	5%
engineering	10%
humanities	30%
physical sciences	5%
social sciences	30%
other	10%

--educational and/or career objectives: vary from forestry, environmental engineering, environmental education, wildlife management, in addition to the regular pursuits.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	10%
business and public administration	5%
engineering	20%
humanities	20%
law	5%
physical sciences	20%
social sciences	20%

--appointment and promotion of faculty is by program.

MICHIGAN

1770-p01

GROUP FOR THE ANALYSIS & ASSESSMENT OF TECHNOLOGY
Michigan State University
East Lansing, MI 48824

Dr. Donald J Montgomery, Director
517/355-5157

HISTORY

1. In the winter of 1971, a faculty seminar, normally 1 term long, was extended to the spring 1971 by demand of the participants. The group was formed and held weekly meetings through the spring of 1974. Meanwhile, courses in "Technology & Society" and "Technology Assessment" were developed in support of a program of Engineering Arts in the College of Engineering.

2. Objective: to further the understanding and the accommodation of technology in modern advanced societies.

DEGREES OFFERED

1. Undergraduate: none in the program as such; the College of Engineering offers the B.S. in Engineering Arts.

   Graduate: none in the program as such; both the M.S. and the Ph.D. can be obtained in Technology Assessment, but only in the form of a thesis in a traditional discipline with technology assessment orientation.

2. Some overtures are being made between the College of Business and the College of Engineering to offer a joint degree, but this is a long road.

FUNDING

1. Only a little outside funding is received, depending on what research grants the group can get; these formally go to a department, or to the Division of Engineering Research.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of a college within the university.

2. Relationship with traditional departments: members of traditional departments join and leave the group as they see fit. The program has the support of the departments in the form of encouragement, but as a rule little formal support is given, other than some released time when research proposals are being prepared or executed.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and occasional guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	50%
c. combination of a and b	50%

CONSTITUENCY

1. Students taking courses.

--10% graduates
90% undergraduates

--approximate % from:

agriculture and life sciences	5%
engineering	60%
humanities	5%
physical sciences	10%
social sciences	5%
other	15%

--educational and/or career objectives: to work professionally in engineering or science, directed to application where social implications are prominent.

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering	50%
physical sciences	50%

--appointment and promotion of faculty is by regular department.

1770-p02
LYMAN BRIGGS COLLEGE (LBC)
Michigan State University
East Lansing, MI 48824

Dr. Michael J Harrison, Dean

HISTORY

1. LBC was officially instituted as a separate college at Michigan State University in 1967. The Planning Committee, which drew up the curricular and non-curricular goals of the college, perceived that STS-type studies ought to be an integral part of the B.S. degree program.

2. Objective: It was perceived that students working towards a B.S. in some natural science ought also to be exposed to the difficult and intricate political, sociological, ethical, and humanistic components of urgent problems confronting humanity, as well as their technical dimension.

DEGREES OFFERED

1. Undergraduate: B.S.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. LBC is a college within the university.

2. Relationship with traditional departments: students have a dual major with traditional science departments (called a "coordinate major"), and they complete their undergraduate course work for a major in these respective departments. LBC offers only the introductory courses of its own design in the basic sciences.

3. Other groups involved in STS studies: various other departments throughout the university offer isolated courses in the STS area. LBC jointly offers a course on "Energy & the Environment" with the Physics Department.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and, in special seminars for seniors, with non-interacting guest lecturers.

3. Courses jointly sponsored by departments, in 1 instance.

4. Approximate percent of courses generally:

a. problem oriented	15%
b. systemic/synoptic/descriptive, etc. in approach	80%
c. combination of a and b	5%

5. A curriculum committee of faculty and students plans and approves courses.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:	agriculture and life sciences	60%
	math and computer science	10%
	physical sciences	30%

--educational and/or career objectives: (1) 35% go on to professional graduate school, such as medicine, dentistry, or public administration of some kind; (2) 35% go on to academic graduate school in one of the basic sciences; (3) 30% take their first post-college jobs with technically oriented companies, industries, or laboratories.

2. Faculty teaching program-sponsored courses.

--approximate % from:	agriculture and life sciences	25%
	humanities	20%
	math and computer science	25%
	physical sciences	30%

--appointment and promotion of faculty is by program for those faculty 100% with program; by regular department and program for those faculty on partial joint appointments with program and a traditional department.

1790-p01

CENTER FOR RESEARCH ON UTILIZATION OF SCIENTIFIC KNOWLEDGE (CRUSK)

University of Michigan
Institute for Social Research
Ann Arbor, MI 48106

Dr. Donald Pelz, Director
313/764-2560

HISTORY

1. CRUSK began in 1964 as a result of a growing awareness that research was needed on the gap that existed between what knowledge was already available and what was actually being used to meet problems in our society.

2. Objectives: Investigation of processes of scientific knowledge utilization, the spread of new knowledge, ways of training practitioners to apply research findings in different fields, and values, ethical, and political issues in use of scientific knowledge. How the definition of problems affects research efforts and knowledge utilization outcomes; how scientific knowledge is misused, used, and not used.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 88%
   % of total budget from institution 12%

2. % of outside funds from private foundations 10%
   % of outside funds from government agencies 90%

INSTITUTIONAL ARRANGEMENTS

1. CRUSK is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: although the program itself does not offer courses, senior staff members teach a number of courses in related departments, particularly social science departments, with some in business administration and natural resources.

CURRICULUM

1. Priority is given to research.

CONSTITUENCY

1. Faculty teaching courses.

   --appointment and promotion of faculty is by program.

1800-p01

PROGRAM IN HEALTH & HUMAN VALUES (HHV)
University of Michigan Medical School
M4237 Medical Science I
Ann Arbor, MI 48104

Dr. Daniel Burke, Director
313/764-8161

HISTORY

1. Late in 1971, a denominational chaplaincy to the medical community in Ann Arbor was revamped into a non-sectarian effort aimed at introduction of so-called medical humanities and the relevant social sciences into the processes of medical and health professional education.

2. Objectives to provide university medical students with systematic exposure to study of value choices and humanities as they relate to medicine. Goals are that graduate students of the center:
   a. become familiar with various modes of moral reasoning and systems of values by which they and other humans and groups operate.
   b. be able to discern and deal with presence of these issues in situations of patient care, research pursuits, and organization of health care.
   c. be aware of resources available to them, when needed, in the making of judgments wherein these value factors play a significant part.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.	% of total budget from outside sources	60%
	% of total budget from institution	40%
2.	% of outside funds from private foundations	100%
	% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. HHV is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: program director is lecturer in Department of Community Health Programs of School of Public Health and a member of the faculty of the Integrated Pre-Medical/Medical Program. As yet, there is no formal relationship to any departments either in the medical school or the rest of the university.

3. Other groups involved in STS studies: University Values Program. Loose and informal relations between this program and HHV. There has been preliminary discussion concerning the offering of university-wide interdisciplinary course on values, technology, and society.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by other programs.

4. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%

CONSTITUENCY

1. Students taking courses.

   --50% graduates
   50% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   agriculture and life sciences
   nursing
   humanities

   --educational and/or career objectives: 90% plan to work in health professions.

2. Faculty teaching program-sponsored courses.

   --only 1 faculty member to date.

MINNESOTA

1830-p01

PROGRAM IN SCIENCE, ETHICS & PUBLIC POLICY (SEPP)
Carleton College
Northfield, MN 55057

Dr. Ian Barbour, Director
507/645-5723

HISTORY

1. Occasional isolated courses were offered prior to 1973. A more systematic program was developed in 1974 with the help of a grant from the NEH.

2. Objectives: offering of a series of interdisciplinary seminars on policy issues involving science and technology, dealing with: normative and technical aspects of science policy decisions; the environmental, social, and human consequences of technology; and priorities and political processes in the assessment and control of technology.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1. % of total budget from outside sources 50%
   % of total budget from institution 50%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. SEPP is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: it draws faculty from various departments.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 40%
   b. systemic/synoptic/descriptive, etc. in approach 30%
   c. combination of a and b 30%

5. There is a curriculum committee for approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   agriculture and life sciences
   physical sciences
   humanities
   social sciences

   --educational and/or career objectives: mostly graduate school in medicine, science, law, education, etc.

2. Faculty teaching program-sponsored courses.

   --approximate % from: agriculture and life sciences 18%
   humanities 39%
   physical sciences 25%
   social sciences 18%

   --appointment and promotion of faculty is by regular department.

MISSOURI

1890-p01

INSTITUTE FOR THEOLOGICAL ENCOUNTER WITH SCIENCE & TECHNOLOGY (ITEST)
Saint Louis University
221 N Grand Blvd.
St. Louis, MO 63103

Robert Brungs, S.J., Director
314/535-3300

HISTORY
1. ITEST began in 1966 and was legally incorporated as a Missouri not-for-profit corporation in 1968. It began with a shared felt-need on the part of several faculty members in the sciences at Saint Louis University.

2. Objectives:

   a. to research the impact of science and technology both on society and on Christianity.

   b. to alert educational and religious institutions to the various aspects of this impact.

DEGREES OFFERED
1. No degrees offered.

FUNDING
1. % of total budget from outside sources 100%*
   % of total budget from institution 0%

   *rely on gifts

INSTITUTIONAL ARRANGEMENTS
1. ITEST is autonomous.

2. Relationship with traditional departments: cooperative. The members of the institute had a large initial role in establishing the Man, Technology, & Society Program (MTS). Many of the members serve as faculty in MTS.

CURRICULUM
1. Priority is given to research.

1890-p02

MAN, TECHNOLOGY, & SOCIETY PROGRAM (MTS)
Saint Louis University
221 N Grand Blvd.
St. Louis, MO 63103

Dr. Fredrick J Dobney, Director
314/535-3300 ext. 410

HISTORY

1. MTS was set up through the support of a curriculum planning grant from the NEH in 1972-73 and a summer workshop grant in 1974 from the university academic vice-president. The impetus for this type of planning came from a new statement of institutional philosophy, articulated by Saint Louis University in 1971, calling for "contextual education" uniting "humanistic, ethical, and theological reflection with specialized technical knowledge, all for the purpose of responsible participation in society."

2. Objectives: seeks to establish an integrated curriculum focusing on the theme "Man, Technology, & Society." The program is the first theme-oriented area of concentration in the university and is also the most coherent and extensive effort to utilize interdisciplinary and multidisciplinary approaches to teaching. Specifically, the program seeks to encourage humanistic perspectives in the assessment of technology and to provide undergraduate students with a suitable and needed educational foundation in humanistic approaches to the problems presented by a pervasively technological society.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1.	% of total budget from outside sources	65%
	% of total budget from institution	35%
2.	% of outside funds from private foundations	0%
	% of outside funds from government agencies	100%

INSTITUTIONAL ARRANGEMENTS

1. MTS is under the jurisdiction of a school or college within the university.

2. Relationship with traditional departments: MTS works with, rather than competing with, existing departments, and seeks out faculty from the departments who have an interest in teaching MTS-related courses.

3. Other groups involved in STS studies: Institute for Theological Encounter with Science & Technology. MTS tries to use their resources.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a.	problem oriented	25%
b.	systemic/synoptic/descriptive, etc. in approach	25%
c.	combination of a and b	50%

5. MTS has a core faculty, an advisory committee drawn from interested Arts & Sciences faculty, and provides for 4 summer grants (in each of the 5 years of the program) for faculty members to develop new MTS-related courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   humanities
   social sciences
   physical sciences
   agriculture and life sciences
   business and public administration

   --educational and/or career objectives: varied; general liberal arts and pre-professional majors.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

humanities	40%
physical sciences	30%
social sciences	30%

   --appointment and promotion of faculty is by regular department.

1920-p01

SOCIAL FACTORS IN TECHNOLOGY PROGRAM

University of Missouri-Rolla
Rolla, MO 65401

Dr. EH Epstein, Acting Director
314/341-3175

HISTORY

1. A proposal for establishment of this program is presently under consideration.

2. Objectives: to advance social scientific understanding of technology and technological change, and to prepare individuals with specialized knowledge in the social scientific implications of technology for responsible positions in government and industry.

DEGREES OFFERED

1. There are plans for a B.S. in history, economics, psychology, or sociology with an option in Social Factors in Technology.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the Social Sciences Department.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --approximate % from:

engineering	8%
humanities	10%
physical sciences	2%
social sciences	80%

   --educational and/or career objectives: varied.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

engineering	10%
social sciences	90%

   --appointment and promotion of faculty is by regular department.

1930-p01

CENTER FOR BIOLOGY OF NATURAL SYSTEMS (CBNS)
Washington University
Box 1126
St. Louis, MO 63130

Dr. Barry Commoner, Director
314/863-0100 ext. 4960

HISTORY

1. CBNS was established in 1966 as a pioneer effort to apply the multidisciplinary resources of the university to the resolution of issues generated by the growing deterioration of the environment.

2. Objectives: examination of the crises generated by the transformation of agricultural and industrial production in an effort to fill gaps in the knowledge needed to understand them. This information is made available to other investigators, to the citizens who need to be informed about relevant social issues, and to the agencies which must act to resolve them.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources	100%
% of total budget from institution	0%
2. % of outside funds from private foundations	10%
% of outside funds from government agencies	90%

INSTITUTIONAL ARRANGEMENTS

1. CBNS is autonomous/independent/intercollegiate.

CURRICULUM

1. Priority is given to research.

CONSTITUENCY

1. Program faculty.

--approximate % from:

agriculture and life sciences	40%
humanities	20%
physical sciences	30%
social sciences	10%

1930-p02

TECHNOLOGY & HUMAN AFFAIRS (THA)
Washington University
St. Louis, MO 63130

Dr. Robert P Morgan, Chairman
314/863-0100 ext. 4506

HISTORY

1. The master's degree program was started in 1971; the bachelor's degree program was started in 1972; the doctoral program began in 1976. The Center for Development Technology (CDT) was established in 1968. (CDT represents the principal research outlet for THA faculty.) THA became a department in the School of Engineering & Applied Science in 1976.

2. Objectives: want students to:

   a. receive a holistic education--coordinated view of the relationship between technology and society.

   b. be literate and articulate--be able to communicate scientific and technological concepts and their applications to the public.

   c. understand how the US and global systems work--how science and technology policy is made; how to become part of the decision-making process.

   d. acquire significant degree of understanding of particular problem or issue.

e. acquire marketable skills such as engineering and social science skills, combined with emerging techniques of technology assessment, forecasting, etc.

DEGREES OFFERED

1. Undergraduate: B.S.

   Graduate: M.S., M.A., D.Sc.

2. Ph.D. may be proposed in the Graduate School of Arts & Sciences for students with social science backgrounds.

FUNDING

1. % of total budget from outside sources 67%
   % of total budget from institution 33%

2. % of outside funds from private foundations 40%
   % of outside funds from government agencies 60%

INSTITUTIONAL ARRANGEMENTS

1. THA is a department within the School of Engineering & Applied Science.

2. Relationship with traditional departments: the master's degree programs have one faculty advisory committee overseeing the programs, consisting of faculty from Engineering and Arts & Sciences.

3. Other groups involved in STS studies: CDT; shares budget and director with THA.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

   a. problem oriented 30%
   b. systemic/synoptic/descriptive, etc. in approach 20%
   c. combination of a and b 50%

5. The M.S./M.A. program is administered by executive advisory committees representing several departments within Engineering and Arts & Sciences; B.S. program administered as interdepartmental activity within School of Engineering & Applied Science.

CONSTITUENCY

1. Students taking courses.

   --65% graduates
   35% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   agriculture and life sciences
   social sciences
   engineering
   physical sciences
   business and public administration
   law

   --educational and/or career objectives: employment in "think tanks," in public service sector, in industry. Graduate or professional study in medicine, urban engineering, law.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

engineering	60%
physical sciences	20%
social sciences	20%

   --appointment and promotion of faculty is by program (i.e., regular department).

NEBRASKA

1980-p01

RESEARCH IN RELIGION & ETHICS IN HEALTH CARE DELIVERY PROBLEMS/ PROGRAM IN HUMANITIES FOR THE HEALTH SCIENCES (HHS)
Creighton University
2500 California St.
Omaha, NE 68178

James J Quinn, S.J., Director
402/536-2700

HISTORY

1. The program began in 1972. A faculty member was given a leave of absence to pursue the theological aspects of health care delivery. During this time he received a doctorate and returned to Creighton University to direct a program of humanities for the 4 health science schools: Nursing, Dentistry, Medicine, and Pharmacy. Each one of these schools did have some aspect of the humanities being taught. The program was given a great impetus through a grant to allow 3 professors from theology and 3 from philosophy to do research, present courses to undergraduates, and become part of the humanities module for each one of the health sciences.

2. Objectives: the next phase of the program is to incorporate other humanities (history, sociology, political science, English, classics, and psychology). Courses in all these branches of the humanities will be offered to the undergraduates and to professional students. If grant money is not received, some other means of allowing faculty to do research in these areas will have to be developed.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 60%
   % of total budget from institution 40%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of a department.

2. Relationship with traditional departments: entire school involved in program courses, faculty and student body. At present there are 7 members involved in doing this type of work. By the end of next year, if a grant is received, there will be 16 faculty members involved in presenting the humanities to the student body.

3. Other groups involved in STS studies: a center for peace; ecology program within Biology Department. HHV faculty members participate in panel discussions, seminars, and workshops of these other programs.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:
   a. problem oriented 50%
   b. systemic/synoptic/descriptive, etc. in approach 35%
   c. combination of a and b 15%

5. There is a humanities committee which was created when the university received a grant for humanities in the health sciences. Each one of the schools has a group appointed from the faculty who are considering at present the situation of the humanities in the health sciences. They are constructing proposals to be given to the curriculum committee.

CONSTITUENCY

1. Students taking courses.

   --30% graduates
   70% undergraduates

   --approximate % from:

agriculture and life sciences	70%
business and public administration	10%
humanities	3%
law	12%
physical sciences	2%
social sciences	3%

   --educational and/or career objectives: most students are destined for the health sciences.

2. Faculty teaching program-sponsored courses.

   --appointment and promotion of faculty is by regular department.

NEVADA

2010-p01

COMMITTEE ON THE PHILOSOPHY OF INQUIRY (COPI)
Tentative Title: Knowledge, Human Value, & the Nature of Inquiry
University of Nevada, Reno
Reno, NV 89507

Dr. WT Scott, Director
702/784-6798

HISTORY

1. In 1967, a group of faculty interested in the ideas of M Polanyi as related to science and other fields met with another group developing a program in philosophical psychology. COPI was formed, and for the year 1969-70 had the first of 3 grants from the NEH for support of new courses and for planning for development. A development grant was applied for in 1973 but was not funded. The program is now in the process of reapplying. One to 3 courses per semester are now sponsored.

2. Objectives: put the human, personal element back into science--show how values form an integral part of all inquiry, including science; demonstrate that each level of organization of the world has its own reality and needs its own kind of inquiry; show how science is based on strong personal urges to know what goes on in nature, and to express it in personally and communally responsible ways.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. Received outside funding at one time, but now funded only by the university, at a minimum level.

INSTITUTIONAL ARRANGEMENTS

1. COPI is under the jurisdiction of the College of Arts & Sciences.

2. Relationship with traditional departments: voluntary and cooperative. Nineteen departments have expressed a willingness, and 13 have contributed faculty time to COPI courses.

3. Other groups involved in STS studies: Physics has a special grant to develop a physics and society course; relations are cordial with COPI and they probably will develop into a formal relation.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	47%
b. systemic/synoptic/descriptive, etc. in approach	40%
c. combination of a and b	13%

5. Committees or individuals plan and approve lower level courses; COPI supervises upper level courses.

CONSTITUENCY

1. Students taking courses.

--33% graduates
67% undergraduates

--student distribution by field (listed in decreasing numerical order):

social sciences
humanities
agriculture and life sciences
physical sciences

--educational and/or career objectives: widely variant. Some are graduates in psychology, a few in philosophy. Many are "liberal arts"--however they define it.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	agriculture and life sciences	8%
	education	8%
	humanities	46%
	physical sciences	5%
	social sciences	33%

--appointment and promotion of faculty is by regular department.

NEW JERSEY

2040-p01

CENTER FOR TECHNOLOGY ASSESSMENT (CTA)

New Jersey Institute of Technology
323 High St.
Newark, NJ 07102

Dr. Sanford Bordman, Director
201/645-5273

HISTORY

1. CTA was organized in 1973 under the New Jersey Institute of Technology Foundation for Research.

2. Objectives:
   - a. development of methodology in technology assessment.
   - b. applied research in technology assessment: (1) grants from federal government, (2) grants from state government.
   - c. consultation to industry and government.
   - d. program of education directed to various groups in society.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.	% of total budget from outside sources	95%
	% of total budget from institution	5%
2.	% of outside funds from private foundations	0%
	% of outside funds from government agencies	100%

INSTITUTIONAL ARRANGEMENTS

1. CTA is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: develops new curricula.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:

    a. problem oriented 50%
    b. systemic/synoptic/descriptive, etc. in approach 50%

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

    --60% graduates
    40% undergraduates

    --approximate % from: business and public administration 40%
    physical sciences 50%
    social sciences 10%

    --educational and/or career objectives: engineering, teaching, business administration.

2050-p01

CENTER FOR ENVIRONMENTAL STUDIES (CES)
Princeton University
Engineering Quad
Princeton, NJ 08540

Dr. Irvin Glassman, Director
609/452-5199

HISTORY

1. CES began in 1970 with the establishment of a Council of Environmental Studies, which recommended a research-oriented center be formed.

2. Objectives: to catalyze and complement environmental and energy studies in classical departments and to initiate multidisciplinary research.

DEGREES OFFERED

1. No degrees offered.

2. A Technology & Public Policy Program is being formulated. This will be a graduate program.

FUNDING

1. % of total budget from outside sources 98%
   % of total budget from institution 2%

2. % of outside funds from private foundations 30%
   % of outside funds from government agencies 70%

INSTITUTIONAL ARRANGEMENTS

1. CES is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: provides research support for departmental faculty and students. Department faculty spend part of their time in center facilities.

3. Other groups involved in STS studies: Water Resources and Transportation. CES cooperates fully with these groups when they cover areas of mutual interest. CES does not emphasize water or transportation problems.

CURRICULUM

1. Priority is given to research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 75%
   b. systemic/synoptic/descriptive, etc. in approach 25%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --50% graduates
   50% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   social sciences
   engineering
   humanities
   physical sciences

   --educational and/or career objectives: generally public policy work.

2. Faculty teaching program-sponsored courses.

   --faculty distribution by field (listed in decreasing numerical order):

   social sciences
   engineering

--appointment and promotion of faculty is by regular department. The program has research staff of equivalent faculty ranks who are promoted by the program.

2050-p02

PROGRAM IN HISTORY & PHILOSOPHY OF SCIENCE (HPS)/
PROGRAM IN SCIENCE IN HUMAN AFFAIRS (SHA)
Princeton University
220 Palmer Hall
Princeton, NJ 08540

Dr. Michael S Mahoney, Director
609/452-4157

HISTORY

1. HPS began as a graduate program in 1960 under the auspices of the Departments of History and Philosophy and the Council of the Humanities. When expanded to the undergraduate level in 1968, the program grew to the size of a small department in itself and has enjoyed relative academic and administrative autonomy since 1969. The original moving force was Charles C Gillispie, who received active support from Carl G Hempel, among others.

2. Objectives: at the graduate level, the training of historians of science and philosophers of science for careers in teaching and scholarship at the college and university level. The training goes beyond the program to ensure that students have the training and professional credentials of historians and philosophers, respectively. At the undergraduate level, the program aims at awakening both humanists and scientists to the historical development, the philosophical structure, and the social and cultural impact of the sciences as a major feature of modern western civilization.

DEGREES OFFERED

1. Undergraduate: B.A. Degree is in one of the parent departments, with a Certificate of Proficiency in History & Philosophy of Science.

   Graduate: Ph.D. Degree is awarded by the pertinent parent department.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. HPS is under the jurisdiction of the Departments of History and Philosophy.

2. Relationship with traditional departments: all staff members hold regular appointments in one of the 2 parent departments. Students in the program receive degrees from the pertinent department, depending on the balance of their studies. Though students and faculty play active roles in the parent departments, the program operates on a relatively autonomous basis with regard to curriculum.

3. Other groups involved in STS studies: SHA; runs out of same office and has same staff as HPS. The difference lies in formal organization (HPS is a full-fledged academic program; SHA is a covering committee for curriculum coordination and enrichment) and in level of student involvement (students may not major in SHA, nor does it offer graduate work).

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses occasionally jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	30%
b. systemic/synoptic/descriptive, etc. in approach	70%

5. The staff operates as a committee of the whole, and the pertinent department must approve any course before it goes to the university review committee. Princeton operates with a relatively fixed curriculum, and new courses are correspondingly infrequent.

CONSTITUENCY

1. Students taking courses.

--20% graduates
80% undergraduates

--for majors: 50% graduates
50% undergraduates

--approximate % from:	
agriculture and life sciences	25%
engineering	25%
humanities	20%
physical sciences	20%
social sciences	10%

--educational and/or career objectives: graduates--professional academic; undergraduates--medicine, law, teaching.

2. Faculty teaching program-sponsored courses.

--all are members of the program staff.

--appointment and promotion of faculty is by program and regular department.

2060-p01

SCIENCE IN CULTURAL PERSPECTIVE (SCP)
Ramapo College of New Jersey
School of Theoretical & Applied Science
Mahwah, NJ 07430

Dr. Bernard Langer, Coordinator
201/825-2800 ext. 416

HISTORY

1. SCP concentration was formally established in March 1974. A commitment to stimulate student appreciation of the social dimensions of science was reified in a course core previously offered under the title "Science & Society." The present concentration amplified that commitment by providing a broader range of courses organized according to more specific cognitive and topical areas.

2. Objectives: to stimulate interdisciplinary teaching and research on the interaction of science with society and the relation of the sciences to other systems of knowledge. Courses are organized into 4 substantial areas: science and the humanities, the structure and evolution of science, science and society, and applied science and man. The concentration has an integrative role in the college curricula and provides a focus for research activities and course development.

DEGREES OFFERED

1. No degrees offered. A concentration of at least 8 credits of courses in SCP is required of all School of Theoretical & Applied Science graduates.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. SCP is under the jurisdiction of the School of Theoretical & Applied Science.

2. Relationship with traditional departments: although the majority of courses are offered within the School of Theoretical & Applied Science, a substantial number are cosponsored with other schools in the college.

3. Other groups involved in STS studies: Environmental Studies; there is coordination of cosponsored courses between this group and SCP.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a.	problem oriented	25%
b.	systemic/synoptic/descriptive, etc. in approach	25%
c.	combination of a and b	50%

5. The curriculum committee of the School of Theoretical & Applied Science establishes general policy and approves course offerings.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   physical sciences
   agriculture and life sciences
   social sciences
   humanities

   --educational and/or career objectives: varied, but the majority of students enroll in SCP courses to supplement their professional programs in science.

2. Faculty teaching program-sponsored courses.

   --faculty distribution by field (listed in decreasing numerical order):

   social sciences
   agriculture and life sciences
   humanities
   physical sciences

   --appointment and promotion of faculty is by regular school.

2060-p01

TECHNOLOGY & SOCIETY (TS)
Stevens Institute of Technology
Castle Point Station
Hoboken, NJ 07030

Dr. Arthur Lesser, Jr., Director
201/792-2700 ext. 567

HISTORY

1. TS began in 1971.

2. Objectives:

   a. furnish students with knowledge and tools necessary to conceptualize, analyze, and solve the complex interrelated problems at the interface of technology and society.

b. enable the new professionals emerging from this curriculum to be able to communicate effectively with engineers and scientists.

c. Introduce students to a variety of approaches to problem solving.

DEGREES OFFERED

1. Undergraduate: B.S.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. TS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: faculty from various departments teach courses in the TS curriculum. They also act as student advisors.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Planning was done by an ad hoc committee and approved by the undergraduate curriculum's committee and ultimately by the faculty and trustees.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--educational and/or career objectives: employment orientation emphasizing interface between technology and society.

2. Faculty teaching program-sponsored courses.

--approximate % from:

business and public administration	20%
engineering	10%
humanities	20%
physical sciences	30%
social sciences	15%
other	5%

--appointment and promotion of faculty is by regular department.

NEW YORK

2170-p01

PROGRAM IN HEALTH, MEDICINE, & SOCIETY (PHMS)
City College of the City University of New York
Convent Ave. & 138th St.
New York, NY 10031

Dr. Theodore M Brown, Director
212/690-8255

HISTORY

1. A group of faculty, including faculty from the School of Nursing and the just-created Center for Biomedical Education, began discussions in 1972-73 concerning possible undergraduate teaching and research activities in the area of "Health, Medicine, & Society." A program was launched in September 1973 using City College faculty, Dr. Theodore Brown (who was recruited from Princeton), and Social Medicine faculty from the Department of Social Medicine at the Montefiore Hospital and Medical Center.

2. Objectives: primary objective is to expose undergraduate pre-medical students, nursing students, and those generally interested in health care to health in its social context. Historical, anthropological, sociological, and economic perspectives are combined. A secondary objective is to provide some pre-professional training for students interested in graduate work in public health, health planning, or health care administration.

DEGREES OFFERED

1. Undergraduate: B.A.--24 credits in PHMS "major" and supporting work in economics, sociology, political science, etc.

FUNDING

1. % of total budget from outside sources 50%
   % of total budget from institution 50%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. PHMS is partly in the Division of Social Science and partly in the Center for Biomedical Education.

2. Relationship with traditional departments: courses in medical sociology, history of medicine, etc. offered in traditional social science departments. Faculty from these departments and adjunct faculty collaborate in interdisciplinary courses.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	50%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

agriculture and life sciences (premed)	40%
business and public administration	30%
nursing	30%

--educational and/or career objectives: primarily to "get into the health field," usually meaning obtaining some possible momentum into health planning, administration, etc.

2. Faculty teaching program-sponsored courses.

--approximate % from:

medicine	30%
social sciences	70%

--appointment of faculty is by program and regular department. Promotion is by regular department.

2220-p01

PEACE STUDIES PROGRAM (PSP)
Cornell University
164 Uris Hall
Ithaca, NY 14853

Dr. Franklin A Long, Director
607/256-6370

HISTORY

1. PSP began in the fall of 1970 when it was realized that there were a number of Cornell University faculty interested in arms control, disarmament, US defense policies, and international affairs of a character that could reasonably be brought together under the concept of "Peace Studies."

2. Objectives:

   a. to provide an interdisciplinary forum where Cornell faculty and students could come together to discuss these problems.

   b. to manage a series of seminars and workshops.

   c. to provide support for research programs in the field, including support for graduate students and postdoctoral associates.

   d. to help develop interdisciplinary and teaching programs dealing with these various topics.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.	% of total budget from outside sources	85%
	% of total budget from institution	15%
2.	% of outside funds from private foundations	90%
	% of outside funds from government agencies	10%

INSTITUTIONAL ARRANGEMENTS

1. PSP is intercollegiate.

2. Relationship with traditional departments: links closely with departments; all teaching is undertaken jointly with departments.

3. Other groups involved in STS studies: Program on Science, Technology, & Society (STS); Program on Policies for Science & Technology in Developing Nations (PPSTDN); Research Program on Social Analyses of Science Systems (SASS). PSP has interlocking directorates and some sharing of funds with STS and PPSTDN. Students and postdoctoral associates are frequently joint appointments of 2 of the programs.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter occasionally taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a.	problem oriented	0%
b.	systemic/synoptic/descriptive, etc. in approach	0%
c.	combination of a and b	100%

5. Courses are discussed by the Executive Committee of the program.

CONSTITUENCY

1. Students taking courses.

   --25% graduates
   75% undergraduates

   --approximate % from:

business and public administration	15%
engineering	10%
humanities	25%
law	10%
social sciences	40%

   --educational and/or career objectives: graduate students in the program take their Ph.D.'s in traditional fields, e.g., economics or government, and look for government or academic jobs. Much the same can be said for postdoctoral associates.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

physical sciences	40%
social sciences	60%

   --appointment and promotion of faculty is by regular department.

2220-p02

PROGRAM ON POLICIES FOR SCIENCE & TECHNOLOGY IN DEVELOPING NATIONS (PPSTDN)
Cornell University
180 Uris Hall
Ithaca, NY 14853

Dr. Edmund Cranch, Director
607/256-6484

HISTORY

1. PPSTDN was established by an AID 211(d) grant to Cornell University in August 1971.

2. Objectives: established to develop at Cornell University an institutional base for science and technology policy activities. Its objectives are:

   a. increase competence and interest in issues of science and technology policy in less developed countries.

   b. produce body of people trained in this area.

   c. study science and technology policies and practices and their impact on development.

   d. develop in-depth research and case studies.

   e. establish linkages between Cornell University and science and technology organizations in less developed countries.

   f. develop science and technology policy reference library.

   g. maintain a common, coordinated approach to science and technology policy issues.

DEGREES OFFERED

1. Graduate: Master of Professional Studies (International Development).

FUNDING

1. % of total budget from outside sources 100%
   % of total budget from institution 0%
2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. PPSTDN is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: the Executive Committee members are teaching in several different departments. PPSTDN courses are offered through traditional departments rather than by the program alone.

3. Other groups involved in STS studies: Program on Science, Technology, & Society (STS); Peace Studies Program (PSP); Research Program on Social Analyses of Science Systems (SASS). Linkage between STS and PPSTDN libraries. Many members of PPSTDN also work with other programs studying the impact of science and technology policy on society.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%

5. The Executive Committee approves courses, but planning is mainly initiated and carried out by individual faculty members.

CONSTITUENCY

1. Students taking courses.

   --80% graduates
   20% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   planning
   social sciences
   engineering

--educational and/or career objectives: varied; students come from many departments. Some are heading toward academic careers and some toward careers in government or business.

2. Faculty teaching program-sponsored courses.

--approximate % from:

agriculture and life sciences	16%
business and public administration	16%
engineering	33%
planning	33%

--appointment and promotion of faculty is by regular department.

2220-p03

PROGRAM ON SCIENCE, TECHNOLOGY, & SOCIETY (STS)

Cornell University
614 Clark Hall
Ithaca, NY 14853

Dr. Raymond Bowers, Director
607/256-3810

HISTORY

1. STS began in 1969. A group of faculty perceived that an important area was not receiving coherent attention in the university. Many faculty were active in this area outside of campus at the local, state, and federal levels, but there was no campus organization that could translate these activities into teaching and research activities. Student and public interest was strong.

2. Objectives: to stimulate interdisciplinary teaching and research on the interaction of science and technology with society. This included providing a focus and organization for a number of activities already at Cornell, as well as stimulating new activities. The program was to take the initiative in developing new courses and was to facilitate interdisciplinary collaboration in research.

DEGREES OFFERED

1. Undergraduate: concentration on STS topics can be achieved through an independent major.

   Graduate: graduate minor in Science & Technology Policy within graduate minor Field of Public Policy. Some conventional disciplines will grant advanced degrees for work in STS area.

2. A B.S. in Biology & Society is in the planning stage.

FUNDING

1.

% of total budget from outside sources	85%
% of total budget from institution	15%

2.

% of outside funds from private foundations	50%
% of outside funds from government agencies	50%

INSTITUTIONAL ARRANGEMENTS

1. STS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: cosponsors courses with departments. Students, faculty, and researchers from all areas of the university participate in program activities. STS has a core of about 8 faculty members who have joint appointments with the program and with regular departments. There are about 15 faculty members who are associated with the program but do not hold joint appointments with the program.

3. Other groups involved in STS studies: Peace Studies Program; Program on Policies for Science & Technology in Developing Nations; Research Program on Social Analyses of Science Systems. STS had a significant role in the formation of these organizations (STS provided funds to enable these organizations to begin their activities). Close liaison is maintained, including interlocking steering committees and collaboration in specific projects.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and, in the past, with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs. All courses jointly sponsored with some regular academic unit.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	25%
c. combination of a and b	25%

5. There is no specific curriculum committee, but the general program policies and plans are reviewed by a steering committee of 13 faculty and 2 students, drawn from different Cornell departments. STS core faculty meet regularly to review program activities.

CONSTITUENCY

1. Students taking courses.

--11% graduates
89% undergraduates

--approximate % from:		
	agriculture and life sciences	20%
	business and public administration	2%
	engineering	30%
	humanities	5%
	law	2%
	physical sciences	1%
	social sciences	40%

--educational and/or career objectives: extremely varied. Largest number are studying STS matters as a supplement to more conventional educational and professional goal. A small but increasing number of students intend to specialize in this area.

2. Faculty teaching program-sponsored courses.

		core	associated
--approximate % from:	agriculture and life sciences	10%	0%
	business and public administration	10%	0%
	engineering	5%	25%
	humanities	30%	20%
	law	0%	5%
	physical sciences	20%	5%
	social sciences	25%	45%

--appointment and promotion of faculty is by regular department.

2220-p04

RESEARCH PROGRAM ON SOCIAL ANALYSES OF SCIENCE SYSTEMS (SASS)
Cornell University
390 Uris Hall
Ithaca, NY 14853

Dr. Robert McGinnis, Director
607/256-4801

HISTORY

1. The need for an interdisciplinary program to provide administrative and personnel support for research on policy questions about science was recognized by Robert McGinnis. Other faculty members were supportive of this idea and the concept of SASS was officially recognized in the fall of 1973 with STS and the Cornell University administration as sponsors.

2. Objectives: to promote interdisciplinary research in the social sciences. To construct large quantitative longitudinal data sets on the physical, biological, and social sciences and professional cohorts.

DEGREES OFFERED

1. Graduate: Ph.D. via the Social Systems Research Training Program--trainees from this program serve research apprenticeships in SASS.

FUNDING

1. % of total budget from outside sources 96.7%
% of total budget from institution 3.3%

2. % of outside funds from private foundations 0%
% of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. SASS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: SASS is physically located with the Department of Sociology; however, it has an independent identity in terms of its fiscal responsibility and staffing. One aspect of SASS, a graduate research training program (trainees from this program serve an active apprenticeship in SASS-sponsored projects), is routed through the Department of Sociology. The scope of SASS operations, however, maintains close ties with STS and the School of Industrial & Labor Relations. The principal thrust of the program is research rather than education/teaching *per se*.

3. Other groups involved in STS studies: Program on Science, Technology, & Society (STS); Program on Policies for Science & Technology in Developing Nations; Peace Studies Program. SASS works closely with STS.

CURRICULUM

1. Priority is given to research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by the Department of Sociology.

4. Approximate percent of courses generally:

a. problem oriented	30%
b. systemic/synoptic/descriptive, etc. in approach	70%

5. Courses taught by SASS faculty or research associates are routed through the Department of Sociology, and subsequently through the College of Arts & Sciences for approval.

CONSTITUENCY

1. Students taking courses.

--98% graduates
2% undergraduates

--approximate % from: social sciences 90%
other 10%

--educational and/or career objectives: academic teaching and research; research in industry; research/career in government.

2. Faculty teaching program-sponsored courses.

--100% from social sciences

--appointment and promotion of faculty is by regular department.

2400-p01

CENTER FOR THE STUDY OF THE HUMAN DIMENSIONS OF SCIENCE & TECHNOLOGY (HDC)
Rensselaer Polytechnic Institute
203 West Hall
Troy, NY 12181

Dr. John M Koller, Director
518/270-6574

HISTORY

1. HDC was established in September 1974 by the School of Humanities & Social Sciences. It had an initial grant from the Andrew W. Mellon Foundation.

2. Objectives:

   a. focus on the role of values in scientific and technological activity, and the value implications of technology and science for society and the individual.

   b. develop individual courses and programs of study, leading to a minor and B.S. and M.S. degrees.

   c. engage in new research and scholarship aimed at illuminating the human dimensions of science and technology.

   d. increase public understanding of the human dimensions of science and technology.

DEGREES OFFERED

1. Undergraduate: minor in Human Dimensions of Science & Technology.

   Graduate: M.S.

2. M.S. and B.S. curricula in Science, Technology, & Human Values are presently being developed. Students are currently being admitted into the M.S. in Science, Technology, & Values Program.

FUNDING

1.	% of total budget from outside sources	50%
	% of total budget from institution	50%
2.	% of outside funds from private foundations	50%
	% of outside funds from government agencies	50%

INSTITUTIONAL ARRANGEMENTS

1. HDC is under the jurisdiction of the School of Humanities & Social Sciences.

2. Relationship with traditional departments: traditional departments provide the faculty resources for the center. "Release time" from departments is provided for by HDC.

3. Other groups involved in STS studies: Technology Assessment Center. There is mutual cooperation on certain courses and research projects between this group and HDC.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	40%
b. systemic/synoptic/descriptive, etc. in approach	60%

5. HDC is guided by a Steering Committee made up of representatives of schools of Rensselaer Polytechnic Institute and departments within the School of Humanities & Social Sciences (HSS). Courses are approved by an HSS curriculum committee and by a university faculty committee.

CONSTITUENCY

1. Students taking courses.

-- 5% graduates*
95% undergraduates

*expected to change to 25% by 1976-77.

--approximate % from:

agriculture and life sciences	20%
engineering	40%
humanities	5%
physical sciences	20%
social sciences	5%
other	10%

--educational and/or career objectives: the majority are preparing for careers in industry.

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering	3%
humanities	50%
physical sciences	15%
social sciences	30%
other	2%

--appointment and promotion of faculty is by regular department.

2470-p01

CENTER FOR INTEGRATIVE STUDIES (CIS)
State University of New York at Binghamton
School of Advanced Technology
Binghamton, NY 13901

Dr. John McHale, Director
607/798-2871

HISTORY
1. CIS was initiated in 1968 as a research activity mainly, with opportunities for students to participate on an individual study basis.

2. Objectives:

    a. analyze and project the large-scale future consequences of ongoing social, political, economic, and technological trends.

    b. function as a "sensing unit" concerned with the effect of such trends on the quality of the human environment.

    c. formulate guidelines for study and planning of future developments, with emphasis on social and cultural trends.

    d. assemble and integrate the contributions of many disciplines for the identification and evaluation of the critical interactions of technology and society.

DEGREES OFFERED
1. No degrees offered.

FUNDING
1. Outside funding is received.

INSTITUTIONAL ARRANGEMENTS
1. CIS is under the jurisdiction of the School of Advanced Technology.

2. Relationship with traditional departments: CIS has operated mainly as a research center working generally within the purview of its "parent" School of Advanced Technology, i.e., in its obvious concern with the larger implications of technological development.

CURRICULUM
1. Priority is given to research.

2490-p01

PROGRAM ON TECHNOLOGY & SOCIETY (TS)
State University of New York at Stony Brook
College of Engineering & Applied Science
Stony Brook, NY 11794

Dr. John Truxal, Director
516/246-6750

HISTORY

1. TS was organized during the spring semester of 1975.

2. Objectives:

   a. offers undergraduate minor in Technology & Society and Masters in Applied Science.

   b. develops curriculum materials for secondary schools.

DEGREES OFFERED

1. Undergraduate: minor in Technology & Society.

   Graduate: M.S.

FUNDING

1. % of total budget from outside sources	80%
% of total budget from institution	20%
2. % of outside funds from private foundations	70%
% of outside funds from government agencies	30%

INSTITUTIONAL ARRANGEMENTS

1. TS is under the jurisdiction of the College of Engineering & Applied Science.

2. Relationship with traditional departments: TS has a core faculty of 6. There are approximately 6 other faculty members who are associated with the program. TS courses are cosponsored with other engineering departments.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	20%
c. combination of a and b	30%

5. The College of Engineering & Applied Science curriculum committee must approve all program courses.

CONSTITUENCY

1. Students taking courses.

   —10% graduates
   90% undergraduates

--student distribution by field (listed in decreasing numerical order):

humanities
social sciences
agriculture and life sciences
physical sciences
engineering

--educational and/or career objectives: to gain a better understanding of the impact of technology on society.

2. Faculty teaching program-sponsored courses.

--100% from engineering

--appointment and promotion of faculty is by program and regular department.

2510-p01

INSTITUTE OF ENVIRONMENTAL PROGRAM AFFAIRS (IEPA)
State University of New York College of Environmental Science & Forestry
Syracuse Campus
Syracuse, NY 13210

Dr. D Behrend, Director
315/473-8900

HISTORY

1. IEPA began informally in 1972, formally initiated in mid-1973. It was formulated in response to growing needs of government, industry, citizens groups, etc. for high quality study of environmental problems.

2. Objectives:

   a. to bring the expertise of the State University of New York community to bear on pressing environmental problems as perceived by government, industry, citizen groups, etc.

   b. to promote a more productive melding of research and public service in environmental areas.

   c. to provide expanded opportunities for faculty and student participation in environmental research and public service.

   d. to pursue the above especially through increased activity in both multidisciplinary and interdisciplinary research.

DEGREES OFFERED

1. No degrees offered.

2. A Graduate Program in Environmental Science is being developed which will offer M.S. and Ph.D. degrees. This program will be closely affiliated with IEPA.

FUNDING

1. % of total budget from outside sources 75%
   % of total budget from institution 25%

2. % of outside funds from private foundations 10%
   % of outside funds from government agencies 90%

INSTITUTIONAL ARRANGEMENTS

1. IEPA is an integral part of the college, with activities across the college and the State University of New York system.

2. Relationship with traditional departments: faculty from departments participate in IEPA projects including research, conferences, seminars, etc. Joint efforts with departments include seminars, lectures, internship programs, etc. IEPA strongly supports graduate research assistantships in appropriate projects, with departmental faculty serving as major professors. Graduate degrees are awarded through established degree programs administered by the college's 4 schools. Departments are compensated for faculty time spent on IEPA projects whenever possible, and a system of "internal" sabbatical leave is contemplated.

CURRICULUM

1. Priority is given to research.

2580-p01

ENGINEERING & PUBLIC AFFAIRS (EPA)
Syracuse University
227 Link Hall
Syracuse, NY 13210

Dr. Norman Balabanian, Director
315/423-4401

HISTORY

1. EPA was initiated by the College of Engineering in the fall of 1975.

2. Objectives: to show engineering students how engineering is embedded in the societal matrix, how engineering helps bring about social change, how engineering practices are related to values, and the nature of a professional in contemporary society.

DEGREES OFFERED

1. Undergraduate: B.S.

FUNDING

1. A small amount of outside funding is received, but the program has not been in operation long enough to give meaningful figures.

INSTITUTIONAL ARRANGEMENTS

1. EPA is under the jurisdiction of the College of Engineering.

2. Relationship with traditional departments: faculty from other departments participate in materials preparation and in teaching through released time from their departments.

3. Other groups involved in STS studies: Program on Technology & Society (PTS). EPA students can take courses offered in PTS.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member (mainly) and utilizing the team teaching method with faculty from several disciplines (some).

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	30%
b. systemic/synoptic/descriptive, etc. in approach	30%
c. combination of a and b	40%

5. Program faculty from various engineering departments serve as a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --100% from engineering

   --educational and/or career objectives: engineering.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	engineering	80%
	humanities	10%
	social sciences	10%

2580-p02

PROGRAM ON TECHNOLOGY & SOCIETY (PTS)

Syracuse University
113 Link Hall
Syracuse, NY 13210

Dr. Norman Balabanian, Director
315/423-4401

HISTORY

1. PTS was established in 1972.

2. Objectives:

   a. to act as an umbrella under which courses already taught in various departments could be grouped.

   b. to organize interdisciplinary courses not currently being taught. These courses are taught intermittently.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. PTS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: little direct relationship.

3. Other groups involved in STS studies: Engineering & Public Affairs (EPA). Students from EPA can take PTS courses.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments. In general, courses are either departmental courses listed among program courses or program courses with no relationship to departments.

4. Approximate percent of courses generally:

a. problem oriented	40%
b. systemic/synoptic/descriptive, etc. in approach	40%
c. combination of a and b	20%

CONSTITUENCY

1. Students taking courses.

   --50% graduates
   50% undergraduates

--approximate % from:		
	engineering	20%
	humanities	10%
	physical sciences	10%
	social sciences	20%
	public communications (graduate)	35%
	education and information studies	5%

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	engineering	80%
	social sciences	20%

2620-p01

MULTIDISCIPLINARY PROGRAM IN SCIENCE, TECHNOLOGY, & SOCIETY (STS)

Vassar College
Poughkeepsie, NY 12601

Dr. James Farganis, Director
914/452-7000 ext. 2464

HISTORY

1. STS began in 1970 in response to felt needs by students and some faculty members for serious and systematic discussion of the nature and problems of advanced industrial society.

2. Objectives:

   a. development of an interdisciplinary undergraduate major in STS.

   b. integrated course offerings building towards a holistic understanding of science and its impact on the social world, including the value structure of society. Alternative paradigms and their implications are explored.

DEGREES OFFERED

1. Undergraduate: B.A.

FUNDING

1.	% of total budget from outside sources	50%
	% of total budget from institution	50%
2.	% of outside funds from private foundations	100%
	% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. STS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: faculty are members of regular departments who are released 1/3 time to the program. STS pays 1/3 of their salaries.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Most courses are given by the program without cosponsorship. When there is cosponsorship, it is either by a department or a program.

4. Approximate percent of courses generally:

a.	problem oriented	20%
b.	systemic/synoptic/descriptive, etc. in approach	80%

5. The core staff of STS plans and approves all courses before they are submitted to the curriculum committee of the college for final consideration.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

humanities	10%
physical sciences	30%
social sciences	60%

--educational and/or career objectives: varied. Recent graduates from the program have moved on to law school, medical school, and graduate programs in philosophy and social theory.

2. Faculty teaching program-sponsored courses.

--approximate % from:

physical sciences	33%
social sciences	66%

--appointment and promotion of faculty is by regular department.

NORTH CAROLINA

2670-p01

ENGINEERING & POLICY SCIENCES (EPS)
Duke University
School of Engineering
Durham, NC 27707

Dr. J Dajani, Director
919/684-2434

HISTORY

1. EPS began in 1972 when the Sloan Foundation made a grant for the development of the program.

2. Objectives: double major program that supplements the traditional professional engineering education with training in the formulation, analysis, implementation, and evaluation of public policies.

DEGREES OFFERED

1. Undergraduate: B.S.

2. An M.S. program is in preparation.

FUNDING

1. No outside funding received at the present time.

INSTITUTIONAL ARRANGEMENTS

1. EPS is intercollegiate.

2. Relationship with traditional departments: EPS allows the student to combine 2 majors: one in an engineering department, the other in public policy.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	80%
b. systemic/synoptic/descriptive, etc. in approach	20%

5. A committee on engineering and public policy plans and approves courses.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --100% from engineering

   --educational and/or career objectives: work with local, state, and federal agencies.

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	business and public administration	40%
	engineering	50%
	humanities	10%

   --appointment and promotion of faculty is by regular department.

2670-p02

MEDICINE & PUBLIC POLICY PROGRAM (MPP)
Duke University
Institute of Policy Sciences & Public Affairs
4875 Duke Station
Durham, NC 27706

Dr. Joel L Fleishman, Director
919/684-6612

HISTORY

1. MPP was developed by the present director and the initiatives of the university president in 1971.

2. Objectives: the program is a component of the Institute of Policy Science & Public Affairs. The objectives of the graduate program of the Institute are to provide:
    a. understanding of social and political forces that create social problems and shape public policy.
    b. facility with quantitative and logical methods of forecasting and evaluating policy consequences.
    c. knowledge of use and limitations of policy analysis and awareness of ethical dimensions of policy choice.
    d. in-depth training in politics and economics of policy areas such as health.

DEGREES OFFERED

1. Graduate: M.A. A joint degree is currently offered. It requires one year of course work beyond the standard M.D. program, but is integrated into the medical school curriculum, rather than being added at the end.

FUNDING

1. % of total budget from outside sources 30%
   % of total budget from institution 70%

2. % of outside funds from private foundations 80%
   % of outside funds from government agencies 20%

INSTITUTIONAL ARRANGEMENTS

1. MPP functions as a department.

2. Relationship with traditional departments: separate department with cooperative relationships with other departments, including joint faculty appointments.

3. Other groups involved in STS studies: Roundtable on Science & Public Affairs, with which MPP collaborates.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	10%
b. systemic/synoptic/descriptive, etc. in approach	60%
c. combination of a and b	30%

5. Courses are planned and approved by graduate and undergraduate courses of study committees composed of students and faculty.

CONSTITUENCY

1. Students taking courses.

--80% graduates
20% undergraduates

--approximate % from:

agriculture and life sciences	2%
business and public administration	5%
engineering	5%
humanities	20%
law	10%
physical sciences	2%
social sciences	50%
other	6%

--educational and/or career objectives: too diverse to note.

2. Faculty teaching program-sponsored courses.

--approximate % from:

humanities	10%
social sciences	90%

--appointment and promotion of faculty is by program.

OHIO

2760-p01

HISTORY OF SCIENCE & TECHNOLOGY (HSST)
Case Western Reserve University
Cleveland, OH 44106

Dr. Robert E Schofield, Director
216/368-4129

HISTORY

1. HSST began in 1959 as a part of the curriculum offered by the Department of Humanities & Social Studies of Case Institute of Technology.

2. Objectives: on the undergraduate level, to serve as an educational bridge between humanities and social sciences on one side and natural sciences and technology on the other. Student majors on each side hopefully increase their understanding of subjects on the other, and this heightens their understanding of their own major areas. On graduate level, to turn out a few high quality teaching and research professionals in history of science and technology.

DEGREES OFFERED

1. Graduate: M.A., Ph.D.

2. No undergraduate degree is contemplated. Working toward strong minors for engineering students and history majors; have an "honors humanities major for pre-meds" with substantial amount of history of science and technology.

FUNDING

1. No outside funding is received for teaching; occasional outside funding for individual research projects.

INSTITUTIONAL ARRANGEMENTS

1. HSST is autonomous.

2. Relationship with traditional departments: the explict interdisciplinary character of the program's teaching and research fills traditional departments with dismay. Only other interdisciplinary programs or professional programs (e.g., American Studies, Art History, Library School) are consistently cooperative. HSST works with more traditional departments by teaching cross-listed, more traditional courses.

3. Other groups involved in STS studies: On occasion, American Studies, Department of Religion, Department of Art History. HSST works closely with Art History and American Studies; advisory consultants with Religion.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by other programs.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	75%
c. combination of a and b	25%

5. Program faculty is small (3 persons) and planning is done by the faculty as a whole. Approval is required (but tends to be automatic) by a committee of university faculty.

CONSTITUENCY

1. Students taking courses.

--10% graduates
90% undergraduates

--approximate % from:

agriculture and life sciences	20%
engineering	25%
humanities	15%
physical sciences	25%
social sciences	15%

--educational and/or career objectives: greatest number are engineering students, then science majors intending to become professionals, and then pre-meds intending to become physicians.

2. Faculty teaching program-sponsored courses.

--100% humanists

--appointment and promotion of faculty is by program.

OKLAHOMA

2900-p01

SCIENCE & PUBLIC POLICY PROGRAM (SPPP)
University of Oklahoma
Norman, OK 73069

Dr. Don E Kash, Director
405/364-2318

HISTORY

1. SPPP began in 1970, generated by interest in the Political Science Department and the president's office. The director initially acted as an outside consultant in designing the program, and then was hired to start it.

2. Objectives: to do technology assessments; to teach elective courses based on the assessments. All assessments are carried out by interdisciplinary teams.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 70%
   % of total budget from institution 30%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. SPPP is under the jurisdiction of a graduate college within the university.

2. Relationship with traditional departments: all members have joint appointments.

CURRICULUM

1. Priority is given to research.
2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.
3. Courses jointly sponsored by departments.
4. Approximate percent of courses generally:

a. problem oriented	60%
b. systemic/synoptic/descriptive, etc. in approach	40%

CONSTITUENCY

1. Students taking courses.

-- 5% graduates
95% undergraduates

--approximate % from:

business and public administration	10%
engineering	30%
humanities	20%
physical sciences	10%
social sciences	30%

--educational and/or career objectives: varied.

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering	30%
physical sciences	20%
social sciences	50%

--appointment and promotion of faculty is by program and regular department.

OREGON

2940-p01

FUTURES RESEARCH INSTITUTE (FRI)
Portland State University
PO Box 751
Portland, OR 97207

Dr. Harold A Linstone, Director
503/229-4961

HISTORY

1. FRI was formed in 1972 in recognition of a need to provide a focal point in futures research in the Pacific Northwest.

2. Objectives: to encourage and undertake studies, conferences, and other projects in the area of forecasting and futures studies. These activities should be of benefit not only to the citizens of Portland and Oregon, but may have national or international import. They should involve faculty and students from Portland State University, but by no means be restricted to them.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding, except for the publication of a journal and occasional conference costs.

INSTITUTIONAL ARRANGEMENTS

1. FRI is autonomous/independent/intercollegiate.
2. Relationship with traditional departments: FRI works directly with the Systems Science Ph.D. Program but has no direct contact with other university departments.
3. Other groups involved in STS studies: Systems Science Ph.D. Program, to which FRI provides research and contacts through the publication of an international journal, Technological Forecasting & Social Change.

CURRICULUM

1. Priority is given to research.

2940-p02

SYSTEMS SCIENCE Ph.D. PROGRAM (SS)
Portland State University
PO Box 751
Portland, OR 97207

Dr. Harold A Linstone, Director
503/229-4961

HISTORY

1. In the late 1960's, Portland State University received authorization from the State System of Higher Education to offer doctoral programs in 3 interdisciplinary fields: Environmental Sciences, Urban Studies, and Systems Science. Four departments cooperated in developing SS: Applied Science/Engineering, Economics, Management (Business School), and Math. In 1970 a program director was engaged. Initially all appointments were joint appointments with departments. Subsequently, it was felt that a core of fully committed faculty was essential and appointments directly for SS were initiated. The first Ph.D. was awarded in 1972. The program now has approximately 45 students.

2. Objectives: to provide a program for students in Systems Science leading to a Ph.D. It emphasizes the ability to deal with complex real life problems which do not lend themselves to traditional discipline-oriented or intuitive approaches. It recognizes the importance of holistic as well as analytic perspectives, qualitative as well as quantitative concepts, and the need for a variety of inquiring systems.

DEGREES OFFFERED

1. Graduate: Ph.D.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. SS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: students may come from any of a large number of departments and are encouraged to take courses in departments as well as in the program. Faculty from departments may be on a student's examination committee and may also be the student's dissertation advisor. There is an Advisory Committee which currently includes members of 5 departments.

3. Other groups involved in STS studies: Futures Research Institute (FRI). FRI is co-located with SS and provides a continuing interaction.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	40%
b. systemic/synoptic/descriptive, etc. in approach	40%
c. combination of a and b	20%

5. There is a Systems Science Program Committee which develops the curriculum. It consists of members of the core faculty.

CONSTITUENCY

1. Students taking courses.

--100% graduates

--approximate % from:

business and public administration	14%
engineering	18%
humanities	5%
physical sciences	28%
social sciences	17%
other	18%

--educational and/or career objectives: extremely varied. Students are interested in management (in corporations and government), teaching (at the university level), and research in fields such as forecasting and technology assessment.

2. Faculty teaching program-sponsored courses.

--approximate % from:	business and public administration	20%
	engineering	20%
	physical sciences	20%
	social sciences	20%
	other	20%

--appointment and promotion of faculty is by program.

PENNSYLVANIA

3020-p01

TECHNOLOGY & SOCIETY PROGRAM (TE)
Bucknell University
Lewisburg, PA 17837

Dr. Glenn Keitel, Director
717/524-3711

HISTORY

1. The chairman of the engineering departments began offering a technology-based course for non-engineers in 1970. The formal designation of TE was made in 1975.

2. Objective: to increase the contribution of the College of Engineering to the liberal education of non-engineers and to stimulate interdisciplinary teaching.

DEGREES OFFERED

1. No degrees offered.

2. Exploring the possibility of a Technology & Society major under B.A. degree programs.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. TE is under the jurisdiction of the College of Engineering.

2. Program's relationship with traditional departments: faculty and students are drawn from departments.

3. Other groups involved in STS studies: various academic departments in the College of Arts & Sciences; at present they function independently and maintain close liaison with TE.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	60%
b. systemic/synoptic/descriptive, etc. in approach	40%

5. Program courses must be approved by the College of Engineering Curriculum Committee.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

agriculture and life sciences	10%
business and public administration	10%
engineering	5%
humanities	25%
physical sciences	25%
social sciences	25%

--educational and/or career objectives: these have not been measured. It is believed that most students take courses in the program to augment their liberal education.

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering	90%
humanities	5%
social sciences	5%

--appointment and promotion of faculty is by regular department.

3030-p01

ENGINEERING & PUBLIC AFFAIRS (EPA)

Carnegie-Mellon University
Pittsburgh, PA 15213

Dr. Robert Dunlap & Dr. Gordon Lewis, Co-chairmen
Dr. Granger Morgan, Coordinator, Graduate Program

HISTORY

1. EPA was launched in 1971 in recognition of the need for competent engineers who are both technically skilled and conversant with the social sciences. Planning of the program was supported by a grant from the Esso Education Foundation. Implementation of the program was supported by a Sloan Foundation grant.

2. Objective: to equip a student with both the finest engineering skills and the understanding needed to relate those skills to the social, economic, and political environment in which modern engineering work is embedded.

DEGREES OFFERED

1. Undergraduate: B.S.--double major.

   Graduate: Ph.D.

FUNDING

1. % of total budget from outside sources 40%
   % of total budget from institution 60%

2. % of outside funds from private foundations 50%
   % of outside funds from government agencies 50%

INSTITUTIONAL ARRANGEMENTS

1. EPA is under the jurisdiction of a school within the university, but joint with a second school (School of Urban & Public Affairs).

2. Relationship with traditional departments: all faculty have joint appointments with traditional departments.

3. Other groups involved in STS studies: Technology & Humanities; School of Urban & Public Affairs. There is considerable joint activity between these groups and EPA.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

   a. problem oriented 30%
   b. systemic/synoptic/descriptive, etc. in approach 20%
   c. combination of a and b 20%
   d. oriented toward developing methodological and analytical skills 30%

5. Courses are approved by a college council; they are planned by program faculty.

CONSTITUENCY

1. Students taking courses.

   --10% graduates (new program)
   90% undergraduates

--student distribution by field (listed in decreasing numerical order):

engineering
social sciences
business and public administration
law

--educational and/or career objectives: highly mixed.

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering and physical sciences	50%
social sciences	50%

--appointment and promotion of faculty is by program and regular department.

3030-p02

TECHNOLOGY & HUMANITIES (TH)
Carnegie-Mellon University
Pittsburgh, PA 15213

Dr. Joel A Tarr & Dr. Robert Dunlap, Directors
412/621-2600 ext. 8818 & 600

HISTORY

1. The idea for the program stemmed from experience in a student-generated interdisciplinary course on American industrialism. It was further stimulated by positive interactions between members of the engineering faculty and faculty from humanities and social sciences. The program was funded in the spring of 1975.

2. Objectives: to develop an integrated undergraduate program involving humanists, social scientists, and engineers. To understand technology not only in an operative sense but also in its origins and its impacts.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.	% of total budget from outside sources	67%
	% of total budget from institution	33%
2.	% of outside funds from private foundations	100%
	% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. TH is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: TH sponsors courses that are given in traditional departments, such as history. These courses are usually cross-listed between departments, although prime responsibility will be in one.

3. Other groups involved in STS studies: Engineering & Public Affairs (EPA). EPA and TH share co-directors and faculty cooperate.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a.	problem oriented	0%
b.	systemic/synoptic/descriptive, etc. in approach	0%
c.	combination of a and b	100%

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--student distribution by field (listed in decreasing numerical order):

engineering
humanities
social sciences

2. Faculty teaching program-sponsored courses.

--approximate % from:		
	engineering	40%
	humanities	40%
	social sciences	20%

--appointment and promotion of faculty is by regular department.

3080-p01

PRODUCT LIABILITY: AN INTERACTION OF LAW & TECHNOLOGY
Duquesne University School of Law
Pittsburgh, PA 15219

Dr. William A Donaher, Director
412/434-6288

HISTORY

1. The program began in 1970, when the course was first offered on an experimental basis, followed by the expressed desire by Carnegie-Mellon University faculty to jointly explore the area.

2. Objective: to foster understanding between members of the scientific community and legal community about matters of concern and societal interest.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 10%
   % of total budget from institution 90%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of the School of Law, to the extent of course offering content. It is, in addition, inter-collegiate with the Carnegie-Mellon University School of Engineering.

2. Relationship with traditional departments: In terms of its inter-institution nature, its relationship with traditional departments is innovative. In terms of the course offering, the relationship is usual.

3. Other groups involved in STS studies: courses are offered on environmental law and land use planning; there is informal communication between those offering these courses and the program.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:
   a. problem oriented 100%
   b. systemic/synoptic/descriptive, etc. in approach 0%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --100% graduates

   --100% from law

   --educational and/or career objectives: practice of law in private and public sectors.

2. Faculty teaching program-sponsored courses.

   --100% from law

   --appointment and promotion of faculty is by regular department.

3150-p01

HUMANITIES PERSPECTIVES ON TECHNOLOGY (HPT)

Lehigh University
Bethlehem, PA 18015

Dr. Edward J Gallagher & Dr. Carroll W Pursell, Directors
215/691-7000 ext. 845

HISTORY

1. Discussion among a group of interested Arts College faculty in 1971 crystallized into a grant proposal. An NEH grant beginning in 1972 started the program.

2. Objective: development of an undergraduate minor in Technology & Human Values which would be available to all students in the university.

DEGREES OFFERED

1. Undergraduate: minor in Technology & Human Values.

FUNDING

1. % of total budget from outside sources 80%
   % of total budget from institution 20%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. HPT is under the jurisdiction of a college within the university.

2. Relationship with traditional departments: all faculty are released by departments; almost all courses are given through departments. The program tries to get departments to pick up the courses on a regular basis.

3. Other groups involved in STS studies: International Science & Technology Affairs (ISTA). HPT and ISTA have steering committee links, have cosponsored a lecture series, and are involved in discussions of a future joint program.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:
   a. problem oriented 10%
   b. systemic/synoptic/descriptive, etc. in approach 90%

5. Courses require General Steering Committee approval.

CONSTITUENCY

1. Students taking courses.

   -- 5% graduates
   95% undergraduates

   --approximate % from:

business and public administration	10%
engineering	15%
humanities	35%
physical sciences	15%
social sciences	25%

   --educational and/or career objectives: varied.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

business and public administration	5%
engineering	5%
humanities	70%
social sciences	20%

   --appointment and promotion of faculty is by regular department.

3150-p02

INTERNATIONAL SCIENCE & TECHNOLOGY AFFAIRS (ISTA)/ TRANSNATIONAL DIMENSIONS OF INTERNATIONAL STUDIES (TDIS)

Lehigh University
Maginnes Hall #9
Bethlehem, PA 18015

Dr. Zdenek J Slouka, Director
215/691-7000 ext. 788 or 215/867-5194

HISTORY

1. After a period of related research and teaching as a faculty associate of the Institute for the Study of Science in Human Affairs (Columbia University) and as a fellow of the Woodrow Wilson International Center for Scholars, the program director joined Lehigh University in 1972 and found, among faculty as well as administration, a high level of responsiveness to proposals for the development of STS-type programs with international orientation. A major effort in curriculum development under the title "Humanities Perspectives on Technology" was then already underway at Lehigh.

2. Objectives:

   ISTA: the development of faculty capabilities, curricula, and teaching methods in order to: (a) offer graduate students in engineering and natural sciences international perspectives on the social, political, economic, legal, and ethical environment of their future work and (b) enable students of international affairs to understand better the issues arising from scientific and technological change as well as the processes of science and technology in their role as international social forces.

TDIS: similar objectives on undergraduate level; TDIS's scope is broader than STS, but STS concerns represent the program's most significant single component.

DEGREES OFFERED

1. No degrees offered.

2. A graduate program in Public Administration (M.P.A.) with a specific concentration on Science, Technology, & Public Policy is being developed for 1976-77 or 1977-78.

FUNDING

1. % of total budget from outside sources 50%
   % of total budget from institution 50%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. ISTA/TDIS is under the jurisdiction of a department, in terms of course offerings. In its research dimension, it is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: while the courses offered under the program fall under the Department of International Relations, faculty from other departments and schools, including the College of Engineering, participate in advisory/steering functions as well as in teaching.

3. Other groups involved in STS studies: Humanities Perspectives on Technology (HPT). HPT and ISTA/TDIS are independent but cooperative; they jointly offer courses. Program director of ISTA/TDIS is on the HPT Steering Committee.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and, occasionally, with non-interacting guest lecturers.

3. Courses jointly sponsored by other programs; there are plans for departmental cosponsorship.

4. Approximate percent of courses generally:
   a. problem oriented 50%
   b. systemic/synoptic/descriptive, etc. in approach 25%
   c. combination of a and b 25%

5. Departmental faculty plus faculty from other disciplines and schools act in an advisory capacity.

CONSTITUENCY

1. Students taking courses.

   --10% graduates
   90% undergraduates

   --approximate % from:

agriculture and life sciences	10%
business and public administration	25%
engineering	25%
humanities	5%
physical sciences	10%
social sciences	25%

   --educational and/or career objectives: varied. Most enroll in program courses to gain a dimension enriching their more conventional professional training. The number of engineering students is increasing. Students considering the possibility of specializing in this area are exceptions; no increase is expected except at the public administration policy level.

2. Faculty teaching program-sponsored courses.

   --faculty distribution by field: varies too widely for statistical presentation. Some of the graduate courses were taught jointly, 50-50 by social science and engineering faculty, or 50-50 by a social science-physical science team. However, especially at the undergraduate level, social science faculty represent the core, with engineering, natural science, and physical science faculty only associates.

   --appointment and promotion of faculty is by regular department.

3200-p01

SCIENCE, TECHNOLOGY, & SOCIETY (STS)
Pennsylvania State University
University Park, PA 16802

Dr. Robert Heinsohn, Chairman
814/865-1438

HISTORY

1. STS began in 1968 with an informal association of interdisciplinary faculty concerned with issues of science, technology, and society.

2. Objectives:

   a. provide a special set of educational experiences in science, technology, and society for undergraduates majoring in any disciplines in the university.

   b. provide for scientists and graduate students in any field who have special interest in the interfaces of science, technology, and society, a strong emphasis which might later lead to professional involvement in science policy.

DEGREES OFFERED

1. Undergraduate: STS option to certificate.

   Graduate: minor in STS.

FUNDING

1.

% of total budget from outside sources	20%
% of total budget from institution	80%

2.

% of outside funds from private foundations	0%
% of outside funds from government agencies	100%

INSTITUTIONAL ARRANGEMENTS

1. STS is autonomous/independent/intercollegiate.
2. Relationship with traditional departments: cross-listing of courses with departments.
3. Other groups involved in STS studies: Graduate and Post-doctoral Interdisciplinary Internship Program in the Humanities; there is loose faculty association between this program and STS.

CURRICULUM

1. Priority is given to teaching.
2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.
3. Courses jointly sponsored by departments.
4. Approximate percent of courses generally:

a. problem oriented	45%
b. systemic/synoptic/descriptive, etc. in approach	45%
c. combination of a and b	10%

5. There is an STS Steering Committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --30% graduates
   70% undergraduates

   --approximate % from:

agriculture and lifes sciences	10%
business and public administration	10%
engineering	25%
humanities	10%
physical sciences	10%
social sciences	35%

   --educational and/or career objectives: not readily ascertainable.

2. Faculty teaching program-sponsored courses.

--approximate % from:	agriculture and life sciences	13%
	engineering	50%
	humanities	19%
	physical sciences	13%
	social sciences	5%

--appointment and promotion of faculty is by regular department.

3250-p01

HISTORY & SOCIOLOGY OF SCIENCE (HSS)
University of Pennsylvania
Philadelphia, PA 19174

Dr. Arnold W Thackray, Director
215/243-5575

HISTORY

1. HSS began in 1963 as a small interdisciplinary group granting the Ph.D. degree.

2. Objectives: to understand the nature and dynamics of modern science, medicine, and technology, and of their cultural and social impact. The lectures and seminars of the department focus on the intellectual development of the physical, biological, social, and medical sciences; professional, disciplinary, and institutional processes within the sciences; the interdependence of the sciences with physical, medical, and social technologies; and the interaction of the sciences with politics, economics, philosophy, and the arts. The departmental offerings strongly emphasize historical approaches toward an understanding of modern science, medicine, and technology.

DEGREES OFFERED

1. Undergraduate: B.A.

   Graduate: M.A., Ph.D.

FUNDING

1. % of total budget from outside sources	20%
% of total budget from institution	80%
2. % of outside funds from private foundations	25%
% of outside funds from government agencies	75%

INSTITUTIONAL ARRANGEMENTS

1. HSS is a department.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

a. problem oriented	10%
b. systemic/synoptic/descriptive, etc. in approach	70%
c. combination of a and b	20%

5. Planning and approval of courses is undertaken by the department.

CONSTITUENCY

1. Students taking courses.

--25% graduates
75% undergraduates

--approximate % from:

business and public administration	20%
engineering	10%
humanities	20%
physical and biological sciences	25%
social sciences	25%

--educational and/or career objectives: varied.

2. Faculty teaching program-sponsored courses.

--all faculty are members of the department.

--appointment and promotion of faculty is by regular department (HSS).

RHODE ISLAND

3310-p01

TECHNOLOGY & SOCIETY (TS)
Brown University
Providence, RI 02912

Dr. Rodney Clifton, Director
401/863-2276

HISTORY

1. TS began in September 1972 with the introduction of 10 Technology & Society courses in the Division of Engineering. For the most part, these courses were offered in response to the Executive Committee's request for faculty members to suggest courses that would be of interest to liberal arts students. Previously, the engineering faculty had responded generously to a request for "Modes of Thought" courses to introduce freshmen students to methods of inquiry in various disciplines. However, the engineering faculty had become disenchanted with Modes of Thought courses due, primarily, to the restriction of the courses to first-year students and to class sizes of 20 or less. Thus, the faculty had some course material prepared and responded enthusiastically to the request for Technology & Society courses--even though their introduction caused increased teaching loads.

2. Objectives: the primary objective of the program has been to provide a means for liberal arts students to obtain some understanding of technology, and those who work with technology, without enrolling in the highly structured program designed for engineering students. Thus, the general direction of the program has been towards improved technical literacy of liberal arts students. In many of the courses students are taught technical material and problem solving methods that are encountered in regular engineering courses.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources 20%
   % of total budget from institution 80%

2. % of outside funds from private foundations 100%
   % of outside funds from government agencies 0%

INSTITUTIONAL ARRANGEMENTS

1. TS is under the jurisdiction of the Division of Engineering.

CURRICULUM

1. Priority is given to teaching.

2. Approximate percent of courses generally:
   a. problem oriented 60%
   b. systemic/synoptic/descriptive, etc. in approach 40%

3. Courses are approved by the Executive Committee of the Division of Engineering.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

   --educational and/or career objectives: too varied to summarize.

2. Faculty teaching program-sponsored courses.

   --100% from engineering

   --appointment and promotion of faculty is by regular department.

TENNESSEE

3420-p01

PROGRAM IN SCIENCE, VALUES, & SOCIETY (SVS)
Maryville College
Maryville, TN 37801

Dr. David P Young, Director
615/982-9286

HISTORY

1. In 1970-71, the director was on leave for research and teaching with the Cornell University STS Program under the sponsorship of an NSF Science Faculty Fellowship. In 1971, the science faculty inaugurated 3 programs as umbrellas for individualized majors: SVS, Program in Behavior, and Program in Environmental Quality. Only SVS has survived the test of student and faculty interest.

2. Objectives:

   a. to open up options in undergraduate education which are in line with the greatness of the liberal arts tradition, and which at the same time challenge students and faculty to create new patterns of thinking that will inspire the world, both by spirit and by deed.

   b. to be concerned with the ethical, social, religious, and legal implications of the continued advancement and use of the knowledge of science and technology so that considerable attention can be given to possible futures before they happen.

DEGREES OFFERED

1. Undergraduate: individualized major.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. SVS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: no departmental ties. It is under the direction of college guidelines for student-initiated individualized major programs (in lieu of traditional departmental majors).

3. Other groups involved in STS studies: Project on Futuristics, which has the same director as SVS.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	100%
b. systemic/synoptic/descriptive, etc. in approach	0%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

agriculture and life sciences	30%
humanities	20%
physical sciences	30%
social sciences	20%

--educational and/or career objectives: quite varied. They include: mental health work, graduate school in cultural geography, high school education, marriage with an interesting educational background.

2. Faculty teaching program-sponsored courses.

--faculty distribution by field (listed in decreasing numerical order):

physical sciences
agriculture and life sciences
humanities

--appointment and promotion of faculty is by regular department.

3420-p01

PROJECT ON FUTURISTICS

Maryville College
Maryville, TN 37801

Dr. David P Young, Director
615/982-9286

HISTORY

1. The project was initiated in September 1973. It was born out of a desire to invent new patterns of learning contact, both curricular and non-curricular.

2. Objectives:

   a. to develop future perspective, i.e., a disciplined combination of where we have been, where we are now, and where we might go.

   b. to think about the future before it happens, including taking responsibility for inventing the future.

   c. to dream: how else can there be change for the better?

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. The program is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: has no departmental ties. Attempts to link horizontally departmental concerns, i.e., generalist in approach, rather than specialist.

3. Other groups involved in STS studies: Program on Science, Values, & Society; the 2 programs have the same director.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	100%
b. systemic/synoptic/descriptive, etc. in approach	0%

5. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:	agriculture and life sciences	20%
	humanities	40%
	physical sciences	20%
	social sciences	20%

--educational and/or career objectives: quite varied.

2. Faculty teaching program-sponsored courses.

--100% from futuristics

--appointment and promotion of faculty is by regular department.

3560-p01

STUDIES OF THE FUTURE (SF)
University of Houston at Clear Lake City
2700 Bay Area Blvd.
Houston, TX 77058

Dr. Jib Fowles, Director
713/488-9250

HISTORY

1. SF began in September 1975 when the new campus opened. The program was proposed when the new campus was still on the drawing board.

2. Objectives: for M.S. degree candidates, to broaden their undergraduate education and prepare them for positions in the forecasting capacities of public or private organizations; to prepare them for higher degrees.

DEGREES OFFERED

1. Graduate: M.S.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. SF is under the jurisdiction of a school or college within the university.

2. Relationship with traditional departments: there are no traditional departments within this university, only programs.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member.

3. Courses jointly sponsored by other programs.

4. Approximate percent of courses generally:

a.	problem oriented	0%
b.	systemic/synoptic/descriptive, etc. in approach	0%
c.	combination of a and b	100%

5. There is a program committee of 14 faculty members which plans and approves courses.

CONSTITUENCY

1. Students taking courses.

   --100% graduates

--approximate % from:	business and public administration	20%
	humanities	20%
	social sciences	40%
	other	20%

   --educational and/or career objectives: to work as forecasters and planners.

2. Faculty teaching program-sponsored courses.

--approximate % from:	business and public administration	20%
	humanities	20%
	social sciences	60%

   --appointment and promotion of faculty is by program.

VERMONT

3620-p01

GODDARD COLLEGE INSTITUTE FOR SOCIAL ECOLOGY (ISE)
Goddard College
Plainfield, VT 05667

Dr. Murray Bookchin, Director
914/357-7245

HISTORY

1. ISE began in 1972 when the director was appointed to the Resident Undergraduate Faculty and initiated courses in various aspects of human and social ecology. Owing to strong student interest, part of the resident faculty and newly hired faculty began to press for a distinctive institute status and for a 40-acre farm adjacent to the college campus for the development of alternate energy and horticultural facilities. By 1975 the Institute had been formed and a highly sophisticated facility--including a solar/aquacultural facility, several windmills, solar water heaters, organic waste-disposal units, a dome/aquacultural unit, and experimental organic horticultural plots--had been established.

2. Objectives: explore in detail basic cultural, social, and economic roots of environmental crisis; examine practical alternatives to existing forms of social organization, technology, and urban life and values.

DEGREES OFFERED

1. Undergraduate: the undergraduate degree is in the general college B.A. degree. If there is a concentration on ISE courses, an accompanying letter is provided to indicate this.

   Graduate: the M.S. degree may specify: "Social Ecology," "Environmental Studies," "Urban Studies," and "Urban Ecology."

2. A B.A. in ISE studies is under consideration.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. ISE is independent.

2. Relationship with traditional departments: generally independent of established departments, but a working collaboration exists in which the facilities and faculty of ISE provide and receive services from the college as a whole. ISE includes not only undergraduate students and special summer enrollees (15 credit program for summer students), but also is developing a master's program in collaboration with the Goddard College Graduate Program. The emphasis in the graduate program is on urban ecology and is centered in the New York metropolitan region. The core faculty of ISE consists of 10 teachers and researchers. The summer program includes 10 additional visiting faculty.

3. Other groups involved in STS studies: the science faculty of the resident undergraduate faculty deals with STS issues as does the graduate faculty. Liaison exists between individual faculty and counseling groups. The resident and graduate faculties are represented on the ISE advisory board.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments and other programs.

4. Approximate percent of courses generally:

   a. problem oriented 40%
   b. systemic/synoptic/descriptive, etc. in approach 60%

5. The core faculty comprises a committee of the whole, and the director in collaboration with coordinators and a resident director decide curricula and choice of visiting faculty.

CONSTITUENCY

1. Students taking courses.

   --10% graduates
     90% undergraduates

   --approximate % from:

agriculture and life sciences	20%
humanities	30%
social sciences	50%

   --educational and/or career objectives: a sizable percentage, as yet indeterminable, see ISE courses as a basis for formulating their own life goals, i.e., ecological life styles, communal living, community activities. Quite a few view the program as a stepping stone for career objectives such as environmental sciences, professional advisors to planning agencies and architectural firms, possibly governmental jobs, and educators or writers in social ecology.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

agriculture and life sciences	20%
engineering	20%
physical sciences	10%
social sciences	30%
other	20%

   --appointment and promotion of faculty is by program.

VIRGINIA

3660-p01

THE CENTER FOR SCIENCE & ETHICS IN PUBLIC POLICY (CSEPP)
Christopher Newport College & the College of William & Mary
Newport News, VA 23606

AM Buoncristiani, Alan E Fuchs, David Little, George R Webb, & Jane C Webb, Directors
804/599-7082

HISTORY

1. CSEPP began in the summer of 1973 in a series of informal discussions that 3 of the present directors had concerning the reaction of the people in our country to the Watergate disclosures. It was felt that the time had come for the national and local community to examine the complex interactions between advances in behavioral, natural, and physical science and political decision making, especially in that realm where questions of ethics were critical. The forum that was chosen, and is still in use, is a series of workshops involving professional politicians, journalists, and citizens.

2. Objectives: give people in developing communities and in urban areas the skills to understand basic principles behind the scientific and technological developments that are becoming so important to those areas; give these people a skill in the humanistic disciplines of ethical decision making so that they can begin to evaluate realistically the impact of a given technological innovation on the community's way of life.

DEGREES OFFERED

1. No degrees offered. The program is concerned primarily with citizens in the state of Virginia who have already graduated from college or who have no formal connection with a college. The workshops carry no academic credit. However, many of the ideas that have been developed for use in the workshops are being used in courses in several of the colleges in the area.

FUNDING

1. % of total budget from outside sources 96%
   % of total budget from institution 4%

2. % of outside funds from private foundations 0%
   % of outside funds from government agencies 100%

INSTITUTIONAL ARRANGEMENTS

1. CSEPP is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: housed in the Department of Physics, Christopher Newport College.

3. Other groups involved in STS studies: Science & Society Unit: Department of Physics; the 2 programs share directors.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:
   a. problem oriented 0%
   b. systemic/synoptic/descriptive, etc. in approach 0%
   c. combination of a and b 100%

4. CSEPP offers workshops that range from 3 hours to 2 days in length. The workshops have been held in Tidewater, Virginia thus far, but soon will be offered in other parts of the state. They are designed by the directors of the center in cooperation with citizen-advisors.

3660-p02

SCIENCE & SOCIETY UNIT—DEPARTMENT OF PHYSICS (SSU)

Christopher Newport College
PO Box 6070
Newport News, VA 23606

Dr. Jane C Webb, Director
804/596-7611 ext. 230

HISTORY

1. SSU began in the fall of 1972 when the president of the college brought the director in from Tulane University to design an undergraduate curriculum that would (1) appeal to students in the liberal arts and in business and (2) not duplicate efforts of the parent college, William & Mary.

2. Objectives: to include a strong philosophical and value-oriented component within fairly traditional courses; to introduce students at the beginning level to the theory of modeling.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. SSU is under the jurisdiction of the Department of Physics.

2. Relationship with traditional departments: it is entirely within the Department of Physics; it is not viewed with approval by other science departments.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	75%

5. Courses are planned by members of the Department of Physics.

CONSTITUENCY

1. Students taking courses.

   --100% undergraduates

--approximate % from:	
business and public administration	10%
humanities	30%
physical sciences	50%
social sciences	10%

2. Faculty teaching program-sponsored courses.

--approximate % from:	core	associated
business and public administration	0%	10%
humanities	60%	70%
physical sciences	40%	10%
social sciences	0%	10%

3700-p01

PROGRAM IN HUMAN BIOLOGY & SOCIETY (HBS)
University of Virginia School of Medicine
Medical Center Box 325
Charlottesville, VA 22901

Dr. Thomas H Hunter, Director
804/924-2151

HISTORY

1. HBS began in 1970-71 with a grant from the Commonwealth Fund which created an endowed chair for the director.

2. Objectives: to bring biological problems of societal concern to the attention of students, faculty, housestaff, and the public, and to promote interdisciplinary analysis of these problems.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. Outside funding is no longer received.

INSTITUTIONAL ARRANGEMENTS

1. HBS is under the jurisdiction of the School of Medicine.

2. Relationship with traditional departments: the program is based in the Medical School, with strong representation in the Law School and less so in the Arts & Sciences, Engineering, and Graduate Business Schools.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:

   a. problem oriented 100%
   b. systemic/synoptic/descriptive, etc. in approach 0%

4. There is a curriculum committee for planning and approval of courses.

CONSTITUENCY

1. Students taking courses.

   --90% graduates
   10% undergraduates

   --student distribution by field:

   engineering
   law
   nursing and allied health
   business and public administration
   humanities

   --educational and/or career objectives: variable.

2. Faculty teaching program-sponsored courses.

   --faculty distribution by field:

   engineering
   medicine
   religious studies
   law

3740-p01

SOCIETY & THE PROFESSIONS: STUDIES IN APPLIED ETHICS
Washington & Lee University
Lexington, VA 24450

Dr. Louis W Hodges, Director
703/463-9111 ext. 281

HISTORY

1. The program began with the academic year 1974-75. It was funded for an initial 3-year period by a private grant. It was instituted in order to enrich curricular offerings for those in the student body who expect to enter one of the professions.

2. Objectives: to acquaint students with the primary issues facing their expected profession with regard to social impact of that profession; to acquaint students with the available literature through which they might continue to pursue this dimension of professional practice; to increase the students' capacity for sustained reasoning in ethics; to provide practicing professionals an opportunity in a structured academic atmosphere to confront systematically problems arising out of their own practice; to contribute to the literature in the field of applied ethics.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.

% of total budget from outside sources	100%
% of total budget from institution	0%

2.

% of outside funds from private foundations	100%
% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. The program is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: Independent of traditional departments but in one case giving departmental credit in journalism.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	50%
b. systemic/synoptic/descriptive, etc. in approach	50%

5. The Committee on Courses and Degrees of Washington & Lee University reviews courses offered for addition and recommends to the full faculty of the university either their approval or disapproval. Course planning is ordinarily done by the instructors involved.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--approximate % from:

agriculture and life sciences	30%
law	40%
journalism	30%

--educational and/or career objectives: student enrollment in these courses is restricted to those who have a reasonable expectation of entering one of the professions: law, medicine, or journalism.

2. Faculty teaching program-sponsored courses.

--approximate % from:

humanities	25%
law	25%
social sciences	25%
journalism	25%

—appointment and promotion of faculty is by regular department.

WASHINGTON

3750-p01

INSTITUTE FOR ENVIRONMENTAL STUDIES (IES)
University of Washington
Seattle, WA 98195

Dr. Robert O Sylvester, Director
206/543-1812

HISTORY

1. IES was established in September 1972 by the Board of Regents of the University of Washington to provide a coordinated, university-wide, interdisciplinary program in the broad area of human-environment interaction.

2. Objectives: provides teaching at the undergraduate and graduate levels, interdisciplinary environmental research, and is developing environmental programs through public service for the non-university community.

DEGREES OFFERED

1. Undergraduate: may receive degree through General Studies in the College of Arts & Sciences or through interdisciplinary studies in the College of Engineering; a double major is possible.

   Graduate: can pursue individual interdisciplinary program in environmental studies through an appropriate academic unit.

2. Degree programs are now being planned in environmental studies.

FUNDING

1. Grants have been received from private and government agencies for both research and public service activities.

INSTITUTIONAL ARRANGEMENTS

1. IES is under the jurisdiction of a college within the university.

2. Relationship with traditional departments: works with departments to provide both problem-solving expertise and a holistic group of environmental problems, planning, and management.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Approximate percent of courses generally:

a. problem oriented	25%
b. systemic/synoptic/descriptive, etc. in approach	25%
c. combination of a and b	50%

4. The Institute is supervised by an Environmental Studies Board of 11 deans.

CONSTITUENCY

1. Faculty teaching program-sponsored courses.

--approximate % from:	agriculture and life sciences	12.5%
	business and public administration	12.5%
	engineering	37.5%
	humanities	12.5%
	physical sciences	25.0%

--appointment and promotion of faculty is by program and regular department.

3750-p02

SOCIAL MANAGEMENT OF TECHNOLOGY (SMT)
University of Washington
428 Aerospace Lab, FL-10
Seattle, WA 98195

Dr. Edward Wenk, Jr., Director
206/543-7029

HISTORY

1. The university president and the Board of Regents established SMT in 1973. Initial funding involved pooling of state funds directly to SMT, state funds to the College of Engineering, and funds from a Sloan Foundation grant to add social dimensions to engineering education.

2. Objectives: specific program objectives are to broaden perspectives and awareness of students in all fields as to the role of technology in our society and the policy planning, legal, economic, institutional, and decision making processes by which human wants and needs in a pluralistic society can be extracted.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. % of total budget from outside sources	30%
% of total budget from institution	70%
2. % of outside funds from private foundations	100%
% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. SMT is intercollegiate; the program reports to the Board of Deans comprising deans of engineering, arts & sciences, business administration, public administration, and the graduate school.

2. Relationship with traditional departments: seeks to facilitate academic goals of other established departments, with special emphasis on engineering, to serve their students who would seek an SMT ingredient for a minor or even a major degree option. A faculty advisory committee provides bridges of reciprocal communication between SMT and academic departments, to assist students in combining SMT opportunities in their degree programs and to assist departments in broadening their orientations.

3. Other groups involved in STS studies: arrangements for cooperation already established between SMT and Civil & Nuclear Engineering, Urban Planning, the Graduate School of Public Administration, and the Institute of Environmental Studies. They are emerging in Mechanical Engineering, Health Services, Business Administration, and are projected with other engineering departments, the School of Law, and the Institute for Marine Studies.

CURRICULUM

1. Priority is given to teaching, research, and public service.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	60%
b. systemic/synoptic/descriptive, etc. in approach	20%
c. combination of a and b	20%

5. The Faculty Advisory Committee assists in review of key academic functions such as curriculum, faculty recruitment and promotion, research, and institutional development.

CONSTITUENCY

1. Students taking courses.

--50% graduates
50% undergraduates

--student distribution by field (listed in decreasing numerical order):

engineering
arts and sciences
business and public administration
architecture and urban planning
public health and social work

2. Faculty teaching program-sponsored courses.

--approximate % from:

engineering	60%
law	20%
social sciences	20%

--appointment and promotion of faculty is by program.

WISCONSIN

3890-p01

UNDERGRADUATE PROGRAM ON MAN, TECHNOLOGY & SOCIETY (MTS)
University of Wisconsin-Madison
Madison, WI 53706

Dr. Edward E Daub, Director
608/262-1342

HISTORY

1. MTS began in 1973 when the College of Engineering received a grant from the Sloan Foundation for New Directions in the Social Sciences for Engineering Education.

2. Objectives: to develop a corpus of courses which explore the intersection between technology and the humanities and social sciences, and to promote interdisciplinary study of contemporary social issues which are closely related to technology.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1. No outside funding.

INSTITUTIONAL ARRANGEMENTS

1. MTS is under the jurisdiction of a department.

2. Relationship with traditional departments: faculty and students have been drawn from all areas of the university. Interdisciplinary courses are cross-listed in the General Engineering Department and in the respective social science and humanities departments.

3. Other groups involved in STS studies: a new program is being developed which introduces social science students to the concepts and techniques of systems analysis.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member and utilizing the team teaching method with faculty from several disciplines.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a.	problem oriented	15%
b.	systemic/synoptic/descriptive, etc. in approach	40%
c.	combination of a and b	35%

5. There was a committee for developing the curriculum, but there is no committee at present.

CONSTITUENCY

1. Students taking courses.

   -- 2% graduates
   98% undergraduates

   --student distribution by field (listed in decreasing numerical order):

   engineering
   social sciences
   humanities

   --educational and/or career objectives: diverse. In all cases, students are interested in gaining an understanding of technology in society and culture.

2. Faculty teaching program-sponsored courses.

   --approximate % from:

engineering	40%
humanities	40%
social sciences	20%

   --appointment and promotion of faculty is by regular department.

3900-p01

PROGRAM IN MEDICAL ETHICS
University of Wisconsin Center for Health Sciences
Department of the History of Medicine
Madison, WI 53706

Dr. Norman C Fost, Director
608/262-0802

HISTORY

1. An informal program had been in existence under the leadership of a local clergyman. The present director began in 1973, following his own search for the best institution in which to implement his ideas. There was a significant commitment on the part of the then dean and funds were available, but no conscious search had been conducted.

2. Objectives:

   a. create an opportunity for academicians interested in bridging between medicine and law, philosophy, and other humanities and social sciences.

   b. develop courses at the undergraduate, medical school, law school, and graduate levels (courses have varying objectives).

   c. foster research in areas of medical-ethical interest.

   d. develop resources for consultation activities (clinical, policy, and educational areas).

DEGREES OFFERED

1. Graduate: some graduate students have chosen medical-ethical issues as major or minor areas of study and/or dissertations.

FUNDING

1.

% of total budget from outside sources	40%
% of total budget from institution	60%

2.

% of outside funds from private foundations	100%
% of outside funds from government agencies	0%

INSTITUTIONAL ARRANGEMENTS

1. The program is under the jurisdiction of school or college within the university.

2. Relationship with traditional departments:

   a. most of its pedagogic activities come directly from the program, which is a division of the Department of History of Medicine.

   b. program participates in courses in several other departments at the undergraduate and graduate levels.

   c. research activities conducted jointly with other schools and departments.

   d. all faculty members have joint appointments in addition to History of Medicine.

CURRICULUM

1. Priority is given to teaching and research.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	0%
b. systemic/synoptic/descriptive, etc. in approach	0%
c. combination of a and b	100%

5. The whole program faculty forms the curriculum committee. Approval of courses comes from several other institutional curriculum committees.

CONSTITUENCY

1. Students taking courses.

   --50% graduates
   50% undergraduates

   --educational and/or career objectives: varied.

2. Faculty teaching program-sponsored courses.

   --appointment and promotion of faculty is by program and regular department.

3920-p01

CULTURAL & TECHNOLOGICAL STUDIES PROGRAM (CTS)
University of Wisconsin-Milwaukee
Milwaukee, WI 53201

Dr. Raymond H Merritt, Director
414/963-5788

HISTORY

1. CTS began in 1969. A group of concerned engineering faculty asked liberal arts faculty to develop an undergraduate curriculum that would integrate an understanding of human values and technological perspectives. Under the direction of Raymond Merritt, this proposal was expanded to include an undergraduate program for all university students.

2. Objectives: development of a non-major undergraduate program aimed at understanding the relationship between technology and culture and how this interaction affects human values and can be better utilized to fulfill human needs. A corollary objective has been the development of an interdisciplinary community of scholars interested in the cultural/technological interface. This has been facilitated by CTS-sponsored lectures, symposia, informal regular luncheons, and off-campus conferences. Interdisciplinary research has resulted from this interaction.

DEGREES OFFERED

1. No degrees offered.

FUNDING

1.	% of total budget from outside sources	30%
	% of total budget from institution	70%
2.	% of outside funds from private foundations	15%
	% of outside funds from government agencies	85%

INSTITUTIONAL ARRANGEMENTS

1. CTS is autonomous/independent/intercollegiate.

2. Relationship with traditional departments: all CTS courses have regular department members, although they are listed as well in a special CTS section of the catalog. CTS has a core faculty of 5.5 full-time employees hired by regular departments after consultation with CTS. Core faculty teach 2/3 of their courses in CTS-related areas of their own disciplines. About 20 other associate faculty offer courses once a year as part of their regular departmental duties.

3. Other groups involved in STS studies: Center for Twentieth Century Studies, with which CTS cosponsors events.

CURRICULUM

1. Priority is given to teaching.

2. Teaching involves interdisciplinary subject matter taught by single faculty member, utilizing the team teaching method with faculty from several disciplines, and, occasionally, with non-interacting guest lecturers.

3. Courses jointly sponsored by departments.

4. Approximate percent of courses generally:

a. problem oriented	20%
b. systemic/synoptic/descriptive, etc. in approach	5%
c. combination of a and b	5%

5. The CTS Faculty Steering Committee, composed of representatives from Engineering, Letters & Science, Fine Arts, and Architecture & Urban Design, reviews courses and general policy. All courses must also be screened by departmental, college, and divisional curriculum committees. CTS faculty and staff also hold weekly meetings.

CONSTITUENCY

1. Students taking courses.

--100% undergraduates

--student distribution by field (listed in decreasing numerical order):

engineering
humanities and social sciences
business and public administration
architecture

--educational and/or career objectives: extremely varied. Since there is no CTS major, students take CTS courses to supplement their majors. Majors range from architecture, engineering, elementary education, and criminal justice to music, nursing, business, predental, pharmacy, physical education, and theater, to name some.

2. Faculty teaching program-sponsored courses.

--approximate % from:	agriculture and life sciences	4%
	architecture	4%
	engineering	33%
	humanities	33%
	social sciences	26%

--appointment and promotion of faculty is by regular department.

D. INCOMPLETE LIST OF FACULTY RESEARCH INTERESTS

ARIZONA

0030 ARIZONA STATE UNIVERSITY
Tempe, AZ 85281

School of Engineering:

r01	HW Welch	Social system engineering
r02	AJ Stafford	Social effects of invention

0040 UNIVERSITY OF ARIZONA COLLEGE OF LAW
Tucson, AZ 85721

College of Law:

r01	RJ Davis	Weather modification
r02	D Wexler	Law and psychiatry
r03	RE Clark	Water law

CALIFORNIA

0070 CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, CA 91125

Division of Humanities & Social Sciences:

r01	DJ Kevles	Social and political history of science in America
r02	R Noll	Policy analysis
r03	B Klein	Technological innovation
r04	ME Levine	Regulation of industry and technological use
r05	J Ferejohn	Politics of public works
r06	D Elliot	National security
r07	J Quirk	Health care systems
r08	C Plott	Decision theory and technological innovation
r09	H Brown	Science and government; population

0100 CALIFORNIA STATE COLLEGE, STANISLAUS
Turlock, CA 95380

History Department:

r01 JP Rasmussen	Relevance of history to the post-industrial society; the future of California as a post-industrial society

0120 THE CLAREMONT COLLEGES
Claremont, CA 91711

Joint Science Department:

r01 J Merritt	Budget and manpower: their impact on present and future science policy

0130 CLAREMONT GRADUATE SCHOOL
Claremont, CA 91711

Psychology:

r01 MW Lipsey	Social psychology of science; impact of technology on human values and lifestyles
r02 RL Schwitzgebel	"Consumer-union"-type survey of all commercially available bio-feedback devices

0140 HARVEY MUDD COLLEGE OF THE CLAREMONT COLLEGES
Claremont, CA 91711

Humanities & Social Science Department:

r01 WH Davenport	Literature/technology
r02 JB Rae	History of the engineering profession

0250 SAN FRANCISCO STATE UNIVERSITY
San Francisco, CA 94132

"Earth 2020" Program:

r01 J Stubbs	NASA-Ames/SF State University Consortium: public programs and research in Earth resources planning and management

0260 SAN JOSE STATE UNIVERSITY
San Jose, CA 95192

Cybernetic Systems Program:

r01 D Miller, P Schwartz, OW Markeley	Future studies (some conducted in association with Stanford Research Institute)
r02 G Wallenstein	Telecommunications (some conducted in association with Institute for the Future and NASA-Ames)

0270 STANFORD UNIVERSITY
Stanford, CA 94305

Arms Control & Disarmament Program:

r01 J Lewis, et.al.	Study on arms control with focus on Asia, particularly China and Japan

Program in Values, Technology & Society:

r02 SJ Kline	Foundation concepts for technology-society studies
r03 RE McGinn	Philosophy of technology: concept of technology; technology and values; medical ethics
r04 HS Rosen	History of technology: military technology
r05 N Rosenberg	Economic history of technology; diffusion of technological innovations
r06 W Vincenti	Methodology of technology; social history of technology

Program in Information Technology & Telecommunications:

r07 DA Dunn, et.al.	Social, political, and economic aspects of telecommunications systems

Engineering-Economic Systems:

r08 DG Luenberger, JL Sweeney, PA Morris, SS Oren, ETS Tse	Mathematical system analysis: application of dynamic systems concepts to organizational structure, land-use analysis, housing dynamics, and development of control theory

r09	RA Howard, JE Matheson	Decision analysis: establishment of preference structures, development of decision systems for decentralized use, expert resolution, approximate methods, Markovian decision models, determining the sensitivity to modeling assumptions, and the application of decision analysis to multiparty social decisions (close liaison with Decision Analysis Group of the Stanford Research Institute)
r10	DA Dunn, WW Harman, WK Linvill, JT McAlister	Public policy analysis: future research, national growth policy, telecommunications
r11	DA Dunn, WK Linvill, DG Luenberger, JT McAlister, CK Stiglitz, JL Sweeney	Technology assessment
r12	RD Smallwood, EJ Sondik	Health systems: development of integrated methodology for analysis of health care systems (some conducted with Bay Area Comprehensive Health Planning Council, Stanford School of Medicine, Xerox Palo Alto Research Center)
r13	DA Dunn, WK Linvill	Telecommunications systems: economic models of computer communication networks, effects of pricing policy on congestion in such networks, and international standards and agreements and their effects on domestic systems
r14	WK Linvill, DG Luenberger, JT McAlister, CK Stiglitz, JL Sweeney	National resource management: energy problems, agricultural policy, mineral resource planning, land use planning, efficient use of coastal and marine resources

0280 UNIVERSITY OF CALIFORNIA, BERKELEY
Berkeley, CA 94720

Department of History:

r01	JL Heilbron	Institutionalization of academic physics: 1600-1900
r02	R Hahn	Symposium on quantitative methods in the history of science

The Bancroft Library:

r03	J Hart, R Hahn	History of science and technology in the San Francisco Bay Area

Institute of Governmental Studies:

r04	T La Porte	Public attitudes toward technology
r05	T La Porte	Impact of air transportation on small rural communities
r06	T La Porte	Technological development as social complexifier
r07	T La Porte	High technology and aspects of social disruption
r08	T La Porte	Social aspects of nuclear waste disposal
r09	T La Porte	Issues in the process of technology assessment

Philosophy Department:

r10	M Scriven	Scientific evaluation, including review of the extent to which the procedures used by the science establishment (federal science agencies, for example) are themselves scientific
r11	M Scriven	Science and ethics research on the relation of science to ethics, but with particular emphasis on the medical sciences

0290 UNIVERSITY OF CALIFORNIA, DAVIS
Davis, CA 95616

Division of Environmental Studies:

r01	PA Sabatier, RA Johnston, TC Foin	Use of technical information regarding environmental impacts on coastal decision-making
r02	PA Sabatier, RA Johnston, P Richerson, SI Schwartz	Changes in the planning of information gathered by the Corps of Engineers before and after the National Environmental Policy Act

0320 UNIVERSITY OF CALIFORNIA, LOS ANGELES
Los Angeles, CA 90024

Environmental Science & Engineering:

r01	RL Perrine, D Conn, O Anderson, et. al.	Population and energy in Los Angeles area, with substudies on transportation, fuel conservation, air quality, housing, and open space

0340 UNIVERSITY OF CALIFORNIA, LOS ANGELES, SCHOOL OF MEDICINE
Los Angeles, CA 90024

Medicine & Society Forum:

r01	B Towers	Social and philosophical aspects of the practice of medicine

0360 UNIVERSITY OF CALIFORNIA, SAN DIEGO
La Jolla, CA 92037

Center for Marine Affairs:

r01	E Evans, Jr.	Role of science and technology in less developed countries
r02	J Barkenbus	Political aspects of deep sea mining: global resource interdependence

Program in Science, Technology, & Public Affairs:

r03	H York	Arms control

0370 UNIVERSITY OF CALIFORNIA MEDICAL CENTER
San Francisco, CA 94143

Health Policy Program & Department of Medicine:

r01	AR Jonsen, ML Parker, C Emmott	Biomedical experimentation on prisoners--review of practices and problems and proposal of a new regulatory approach
r02	AR Jonsen, PR Lee, ML Parker, C Emmott	Encyclopedia of Bioethics

Joint Program in Bioethics & Pacific School of Religion:

r03	K Lebacqz	Eugenics: uses of genetic science

Joint Program in Bioethics & Department of Pediatrics:

r04	W Tooley, AR Jonsen	Ethical issues in neonatal intensive care

0380 UNIVERSITY OF CALIFORNIA, SANTA BARBARA
Santa Barbara, CA 93106

Department of Biology:

r01	G Hardin	Population and food limits/policy
r02	P Cloud	Mineral and energy resources/policy

0390 UNIVERSITY OF CALIFORNIA, SANTA CRUZ
Santa Cruz, CA 95064

Merrill College:

r01	FC Andrews	Research-reading program in science, technology, and human values

0410 UNIVERSITY OF SOUTHERN CALIFORNIA
Los Angeles, CA 90007

Center for Futures Research, Technology Assessment Program:

r01	B Nanus, P Gray, et.al.	Telecommunications/transportation tradeoffs
r02	B Nanus, P Gray, et.al.	The multinational computer
r03	B Nanus, P Gray, et.al.	Energy systems

Office of Interdisciplinary Programs--Schools of Engineering, Business Administration, Communications:

r04	J Nilles, F Carlson, P Gray, G Hanneman	Improvement of interdisciplinary research management
r05	J Nilles, F Carlson, P Gray, G Hanneman	Public policy implications of telecommunications alternatives to transportation

COLORADO

0430 COLORADO STATE UNIVERSITY
Fort Collins, CO 80523

Economics:

r01	SL Gray	Energy research development: economic impact upon western slope communities in Colorado
r02	K Nobe	Economic and social impacts on communities of energy extraction and processing in the western region

0450 UNIVERSITY OF COLORADO
Boulder, CO 80302

Chemical Engineering:

r01	F Kreith	Strategies for energy conservation in the U.S.

0470 UNIVERSITY OF DENVER
Denver, CO 80210

Graduate Program in Technology, Modernization & International Studies:

r01	J Szyliowicz	Technology transfer and development in Turkey
r02	J LaVita, J Szyliowicz	The diffusion of technological innovation
r03	Graduate students	The structure of technological society

CONNECTICUT

0480 ALBERTUS MAGNUS COLLEGE
New Haven, CT 06511

Physical Science:

r01	EC Patterson	Autodidacts in 19th century science
r02	EC Patterson	British and American scientific women, especially social forces molding their careers
r03	EC Patterson	Biography of scientific personages
r04	EC Patterson	Demonstrations of interrelations of science and society

0530 UNIVERSITY OF CONNECTICUT SCHOOL OF LAW
West Hartford, CT 06117

Law:

r01	P Shuchman	Comparative study of problems of knowledge in the social sciences and in legal decision making

0560 YALE UNIVERSITY
New Haven, CT 06511

History of Science & Medicine:

r01	DJ de Solla Price	Quantitative research in science policy studies

0570 YALE UNIVERSITY LAW SCHOOL
New Haven, CT 06511

Law, Science & Medicine:

r01	J Katz, B Marshall, et.al.	Research in law, science, and medicine

DELAWARE

0580 UNIVERSITY OF DELAWARE
Newark, DE 19711

Philosophy & Culture of Biomedicine:

r01	P Durbin	Social philosophy of medicine

History & Science, Technology & Society:

r02	G Basalla	Energy and civilization (paper)
r03	G Basalla	Science and technology in popular culture (book)
r04	J Beer	The chemical world of the founding fathers
r05	J Beer	Russia iron transfer to the U.S.A. (monograph)

College of Marine Studies Center, Study of Marine Policy:

r06	G Mangone	Energy policies of the world
r07	G Mangone	Legal/political aspects of artificial islands
r08	G Mangone	Socio-economic study of crude oil transfer and upstream refineries on Delaware Bay

DISTRICT OF COLUMBIA

0600 GEORGETOWN UNIVERSITY
Washington, DC 20057

Center for Bioethics, Kennedy Institute for the Study of Human Reproduction & Bioethics:

r01	WT Reich	Encyclopedia of bioethics
r02	L Walters	Developing a special library of bioethics
r03	L Walters	Establishing an information system for bioethics
r04	L Kass	The philosophy of biology and medicine

r05	RA McCormick	Ethical issues in biomedicine
r06	R Branson	The role of the physician
r07	S Perlin	The ethics of suicide
r08	J Jones	The Tuskegee syphilis study

0610 THE GEORGE WASHINGTON UNIVERSITY
Washington, DC 20052

Program of Policy Studies in Science & Technology:

r01	LH Mayo, VT Coates, et.al.	Technology assessment, technology transfer, economic conversion, R&D management, transportation, and technological innovation

Graduate Program in Science, Technology & Public Policy:

r02	HR Nau, H Pollack	International technology transfer; a framework of issues for U.S. foreign policy

0630 HOWARD UNIVERSITY
Washington, DC 20059

School of Social Work:

r01	AV Adair	Human experimentation: an ancient notion in a new technology and changin morality

School of Business & Public Administration:

r02	HL Levine	Environmental impact of railroad rate structure

School of Engineering:

r03	BA Chiang	Methodology of technology assessment

FLORIDA

0650 FLORIDA A&M UNIVERSITY
Tallahassee, FL 32307

School of Science & Technology:

r01	CB Owens	AID to international development in Kenya

0660 FLORIDA ATLANTIC UNIVERSITY
Boca Raton, FL 33432

Department of Anthropology:	
r01 J Early	Demographic impact of the modernization process on peasant society
Department of Political Science:	
r02 R Thomas	Studies in urban growth management and water resource management, as related to federal-state relationships
Department of Sociology/Social Psychology:	
r03 J Kasarda	Demographic and economic impact of innovations in transportation and communication since World War II on metropolitan areas
r04 A O'Rand	Studies in the social organization of science

0670 FLORIDA INTERNATIONAL UNIVERSITY
Miami, FL 33144

Public Administration Program & the School of Technology:	
r01 WL Tanner, JS Mendell	Value and technology; creativity and ambiguity in policy-making; philosophical and psychological basis of technology assessment
Department of Economics & School of Technology:	
r02 B Thomas, JS Mendell	Technology assessment for developing countries
School of Technology:	
r03 JS Mendell, EI Isibor	Urban technology assessment
r04 JS Mendell	Early warning signals of social and technological change; technology assessment as an early warning system; technology assessment of the application of value analysis and engineering in industry
Department of Philosophy & Religion:	
r05 J Huchingson	General systems applied to philosophy

0720 UNIVERSITY OF SOUTH FLORIDA
Tampa, FL 33620

Philosophy:

r01	WH Truitt	Ethics in government and public policy
r02	WH Truitt	Values in science and technology (proposed for 1976-77)

GEORGIA

0730 CLARK COLLEGE
Atlanta, GA 30314

Physics:

r01	OP Puri	Energy and social aspects

0760 GEORGIA INSTITUTE OF TECHNOLOGY
Atlanta, GA 30332

Social Sciences:

r01	P Kelly, M Kranzberg	Technological innovation: a critical review of current knowledge
r02	J Brittain	History of industrialization in the new South: case studies in electrical innovation

Center for Advanced Studies in Technology:

r03	P Kelly, M Kranzberg	The flow of scientific and technical information in the innovation process
r04	B Bozeman	Federal investment in science and technology: a political economy perspective
r05	B Bozeman, P Kelly, F Rossini	Politics and economics of technologica innovation: strategies for nations at various levels of development

Industrial & Systems Engineering & Center for Advanced Studies in Technology:

r06	A Porter	Technology policy assessment--evaluation methods; highway system policy processes, outputs, and impacts

Industrial & Systems Engineering & Feedback Dynamics:

r07	WR Fey	Feedback dynamics analysis applied to social problem areas
r08	WR Fey	Revision and reevaluation of the world dynamics analysis as described in The Limits to Growth

Industrial Management:

r09	F Allvine	Social and economic implications of the petroleum industry
r10	P Sassone	Economic and social effects of weather changes as a consequence of SST development (CIAT Project for DoT)

Engineering Experiment Station--
Applied Sciences Department:

r11	R Mason	Methodology for identification and evaluation of policy options related to technology, in particular along energy and other resource utilization dimensions

~~Engineering Experiment Station--~~
Applied Sciences Department & Industrial Engineering:

r12	R Mason	Technology assessment and information service evaluation; economic aspects of technology policy alternatives, systems approach to social systems

Qualitative Aspects of Solar Energy:

r13	Clarke	Determination of social acceptance of an alternative form of energy in buildings

Electrical Engineering & Architecture:

r14	Ray, Clarke	Impacts of the energy crisis

0780 MEDICAL COLLEGE OF GEORGIA
Augusta, GA 30902

Humanities & Department of Psychiatry:

r01	R Martin, E McCranie, A Horowitz	The significance of sex status for diagnosis and treatment

Humanities:

r02	R Martin	Medical disease terminology as ideal-typical conceptualization
r03	R Martin	The medical contract: its nature, function, and significance

Humanities & Department of Neurology:

r04 R Martin, M Hamilton, et.al.	An interdisciplinary approach to developmental disabilities

IDAHO

0840 THE COLLEGE OF IDAHO
Caldwell, ID 83605

Regional Studies:

r01 D Parsons	Housing development impact studies

ILLINOIS

0900 ILLINOIS INSTITUTE OF TECHNOLOGY
Chicago, IL 60616

Education & Experience in Engineering Program Center:

r01 TP Torda, A Beck	Educational evaluation plan
r02 TP Torda, R Scharf, K Pandey	Urban transportation problems
r03 TP Torda, R Scharf	Wind-mill siting for power generation, including problems in land use

Political Science:

r04 PH DeForest	International scientific community and world politics

0950 NORTHWESTERN UNIVERSITY
Evanston, IL 60201

Center for the Interdisciplinary Study of Science & Technology:

r01 M Radnor	Development of a field of educational R&D Management
r02 M Radnor, G Zaltman	The impact of the tools of technology on the institutionalization of science the case of high energy physics
r03 M Radnor	Studies and action programs on the law enforcement equipment R&D system

School of Management:

r04 M Radnor	NASA and its laboratories in a changin environment

Transportation Center & Center for the Interdisciplinary Study of Science & Technology:

r05	JL Schofer, GJ Rath	Technology assessment of intercity transportation systems

Program of Research on the Management of R&D:

r06	AH Rubenstein	Idea flow in research and development
r07	AH Rubenstein	Strategies for organization and diffusion of research in developing countries
r08	AH Rubenstein	Project selection in research and development
r09	AH Rubenstein	Methodology of research on research
r10	AH Rubenstein	Workshop on technology transfer to developing countries

Urban Affairs:

r11	C Condit	The railroad system of metropolitan New York

Managerial Economics & Decision Sciences (Graduate School of Management):

r12	M Kamien, N Schwartz	The relation between market structure and innovation
r13	M Kamien, N Schwartz	Microeconomics of the determination and consequences of technological advance

Sociology:

r14	AS Feldman	Social change: a longitudinal survey of industrialization and change in Puerto Rico

0980 ROOSEVELT UNIVERSITY
Chicago, IL 60605

Physical Science:

r01	M Goran	Science, technology, and public policy

0990 SANGAMON STATE UNIVERSITY
Springfield, IL 62708

Philosophy:

r01	GM Schurr	Science and ethics

1000 SOUTHERN ILLINOIS UNIVERSITY
Edwardsville, IL 62025

Center for Urban & Environmental Research & Services & School of Science & Technology:	
r01 A Kahn, R Bruno	Hybrid models for analysis of energy related policy questions for the St. Louis region
Center for Urban & Environmental Research & Services:	
r02 A Kahn	A study of the vulnerability to breakdown in metropolitan technological functions

1020 UNIVERSITY OF CHICAGO
Chicago, IL 60637

Divinity School:	
r01 J Gustafson	Medical ethics
Conceptual Foundations of Science:	
r02 AW Ravin	Interaction of culture and science
r03 S Toulmin	Social evolution of science
Sociology:	
r04 J Ben-David	Sociology of science
History:	
r05 A Debus	Early history of science
r06 K Baker	History of social sciences
r07 J Bylebyl	History of medicine
The College:	
r08 L Kass	Concepts of health and organism; medical ethics

1030 UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE
Chicago, IL 60680

Philosophy:	
r01 Various faculty members	Value theory, action theory, decision theory, social and political philosoph philosophy of history of science
Political Science:	
r02 B Kennen	Energy politics; impact of public policy on energy supplies

r03 LM Wenner	Impact of water pollution control laws on the environment

1040 UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Urbana, IL 61801

Population Dynamics Group:	
r01 P Handler, et.al.	Research in population dynamics using PLATO (visual-interactive computer graphics system)
Engineering, Agriculture, Illinois Geological Survey, Illinois Water Survey:	
r02 J Desmond, S Aldrich	Technology assessment of the increased use of coal on rural communities--including impact upon agricultural productivity
Anthropology & Engineering:	
r03 D Shimkin	Impact of energy shortages on human behavior
Engineering, Agriculture, Urban Planning, Geology, Economics:	
r04 L Hill	Modeling transport systems for bulk commodity flow; impact on rural communities

1050 UNIVERSITY OF ILLINOIS, COLLEGE OF LAW
Champaign, IL 61820

Environmental Law:	
r01 S Plager, R Findley	Federal and state pollution controls
Law and Computers:	
r02 P Maggs	Use of computers in legal education and law practice

INDIANA

1070 INDIANA UNIVERSITY
Bloomington, IN 47401

Advanced Studies in Science, Technology, & Public Policy:	
r01 LK Caldwell	Science policy, with special emphasis on energy, environment, and international institutional arrangements

r02	TA Siddiqi	Technology assessment; energy-environment systems; science policy

1100 PURDUE UNIVERSITY
West Lafayette, IN 47907

General Studies:

r01	LE Trachtman	Development of resource materials reviewing current research in special problem areas

Program in Science, Technology & Public Policy & Political Science:

r02	Friedman	Cigarette smoking and public policy
r03	Friedman	Government earthquake mitigation activities
r04	Galey	Scientists and diplomats in internatio decision making
r05	Galey	International and national issues in marine environmental protection
r06	J Haberer	Political attitudes and involvement of American scientists
r07	J Haberer	Nationalism and internationalism in science
r08	Johnston-Nicholson	Politics of research funding (agriculture)
r09	Johnston-Nicholson	Social choice about technological development

1110 ROSE-HULMAN INSTITUTE
Terre Haute, IN 47803

Interdepartmental:

r01	AT Roper	Mass transit in moderate-sized cities, a brief technology assessment
r02	AT Roper	Delphi: health care delivery in the midwest to the year 2000

IOWA

1180 IOWA STATE UNIVERSITY
Ames, IA 50010

Technology & Social Change in Foreign Cultures:

r01	A Bennett	Technology and a new social order for China
r02	T Solomon	Response of Komeito to social changes in Japanese life
r03	K Seifert	Influence of mineral resources on technology and social change in Japan and China
r04	M Moghari, A Fouad	The impact of the oil technology on Iran, 1901-1951
r05	M Moghari, D Roberts	Nuclear technology for developing countries
r06	J Rhee, J Timmons	Environmental impacts of technologies associated with rapid economical growth in Japan
r07	M Armstrong	Core bibliography and supplement on technology and social change in foreign cultures
r08	R Abraham	Bibliography on technology and social change in China and Japan

KENTUCKY

1280 MOREHEAD STATE UNIVERSITY
Morehead, KY 40351

Environmental Studies:

r01	JF Howell, Jr.	Environmental awareness survey of 49-county area of eastern and south central Kentucky

LOUISIANA

1330 LOUISIANA STATE UNIVERSITY
Baton Rouge, LA 70803

Institute for Environmental Studies:	
r01 JD Martinez, DH Kupfer, RL Thoms	An investigation of the utility of Gulf Coast salt domes for the storage and/or disposal of radioactive wastes
Marketing Department:	
r02 L Richardson	Energy policy; consumer access to technological policy making process

1340 TULANE UNIVERSITY
New Orleans, LA 70118

Public Understanding of Technology Program:	
r01 RH Ebel, E Morse	Study of attitudes toward the impact of technology on society

MAINE

1360 COLBY COLLEGE
Waterville, ME 04901

Environmental Studies Program:	
r01 WH Gilbert, MA Gilbert	Systems ecology portion of an environmental and socio-economic inventory of the New England Coast: New Jersey to the Bay of Fundy

MARYLAND

1420 UNIVERSITY OF MARYLAND AT COLLEGE PARK
College Park, MD 20742

Committee on the History & Philosophy of Science:

r01	J Bromberg	History of physical science and technology; 20th century physics
r02	S Brush	History of physical science; 19th and 20th century planetary physics
r03	L Darden	History and philosophy of biology; 19th and 20th century genetics
r04	J Duffy	History of medicine and public health, especially in the U.S.
r05	JK Flack	American social and intellectual history; scientific institutions
r06	M Gardner	Philosophy of science; philosophy of physics
r07	F Haber	European intellectual history; Darwinism and the concept of time
r08	D Shapere	History and philosophy of natural science; space and time
r09	F Supper	Philosophy of science; history of the philosophy of science
r10	I Waldner	Philosophy of the social sciences; science and society; rational decision theory

MASSACHUSETTS

1440 BABSON COLLEGE
Babson Park, MA 02157

Society & Technology:

r01	R McKeon	History of technology: 17th to 19th century France

1460 BOSTON UNIVERSITY SCHOOL OF LAW
Boston, MA 02215

Center for Law & Health Sciences:	
r01 H Beyer	Rights of adolescents receiving mental health services
r02 Staff attorney	General research in the areas of medical ethics, human experimentation, patients' rights, health care regulations

1510 CLARK UNIVERSITY
Worcester, MA 01610

Science, Technology, & Society, Geography, & Physics:	
r01 R Kasperson, R Kates, C Hohenemser	Nuclear risk assessment and decision making: a cross-national comparative study
Science, Technology, & Society, Physics:	
r02 C Hohenemser, M McClintock	Alternative energy policies--Clark University
r03 M McClintock and collaborators from Holy Cross, Worcester Polytechnic Institute	Methane generation from organic waste
Geography:	
r04 R Kates, M Bowden	Environmental hazards and social response
r05 S Feldman	Solar energy economics
History & Geography:	
r06 R Ford, L Berry	Low technology programs in international development
Government & International Relations:	
r07 O Marwah, A Schulz	Nuclear strategy and control systems in near-nuclear countries
Environmental Affairs:	
r08 H Schwarz	Inter-university task group (U Mass., Rensselaer Polytechnic, Manhattan College SUNY at Albany): Environmental issues in Hudson Basin

1550 HAMPSHIRE COLLEGE
Amherst, MA 01002

Environmental Science & Public Policy:

r01	A Krass, L Wilcox	Technology assessment of the Montague nuclear power plant

1560 HARVARD UNIVERSITY
Cambridge, MA 02138

Program on Information Technologies & Public Policy:

r01	AO Oettinger, Director, and various members of research staff	Basic information on the information industries
r02	AO Oettinger, Director, and various members of research staff	Relationships among individuals, organizations, and information technologies
r03	AO Oettinger, Director, and various members of research staff	Information systems markets/economic aspects
r04	Various members of research staff	Regulation of information systems, public policy, decision making, etc.

Program on the Public Conceptions of Science:

r05	G Holton, V Shelanski	Studies of key problems concerning the ethical and human values implications of science and technology; case studies of ethical dilemmas faced by scientists in the course of their professional duties

Program for Science & International Affairs:

r06	P Doty, Director, and various members of research staff	Military strategic balance/foreign policy and security, arms control, etc.
r07	IC Bupp, JC Derian	Interaction of politics and economics in nuclear energy in several western countries
r08	T Greenwood	U.S. and international policy on energy resources
r09	G Kemp	Geo-political sources of conflict; ocean and ocean resources, population dynamics, changes in military technology and balance of power in Third World regions

r10	G Sharp	Nonviolent struggle and prepared civilian resistance for national defense
r11	D Zinberg	Science-career development in England; attitudes toward arms control and disarmament issues among leaders in science, industry, and government

1570 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Cambridge, MA 02139

Program in Science, Technology, & Public Policy & Political Science Department:

r01	EB Skolnikoff	Science advice in foreign and domestic affairs
r02	EB Skolnikoff	Implications of international organizations for technological change
r03	HM Sapolsky	Reorganization of the blood resource system
r04	HM Sapolsky	History of defense supported research in the universities
r05	T Greenwood	U.S. defense policy, nuclear strategy, the role of nuclear weapons in international politics; nuclear arms contro
r06	T Greenwood	Energy and international conflict, particularly in the Canadian-American case
r07	T Greenwood	The response of governments and the international system to science and technology; technological innovation i the government context
r08	L Winner	Study of alternative visions of technology and politics

Program in Science, Technology, & Public Policy, Political Science Department, & Economics Department:

r09	N Choucri, M Adelman	Long-term resource availability

INP--Nutrition & Center for International Studies:

r10	F Levinson	Nutrition policy planning in developin countries

Research Program on Communications Policy & Center for International Studies:		
r11	I Pool, J Ward, R Crandall	International data communications; pay-TV
Technology Studies Program:		
r12	I Kaplan	History of nuclear engineering; history of atomic theory
r13	C Weiner	Social history of contemporary science and technology, e.g., emergence and growth of research fields, "social responsibility" movements, nationalism and internationalism, and public conceptions of science and technology
r14	C Weiner	MIT oral history program to document developments in science and technology, including social context
r15	J Yellin	Urban population distributions, transport systems, and housing segregation; world petroleum market
r16	J Yellin, P Joskow, H Jacoby	Socioeconomic implications of growth of civilian nuclear power
r17	J Yellin, P Samuelson	Population biology
r18	K Manning	History of mathematics; history of science. Role of Blacks in American science
r19	N Sivin	Projects in Chinese medicine: Shen Kua (1031-1095), a Chinese scientist; source book in Chinese science; canon of the season-granting system (Yuan math-astronomy); Chinese alchemy
r20	L Winner	Ideas of technology in the history of social and political thought; contemporary criticism of technological society; study of alternative visions of technological and political forms; philosophical analysis of concepts of value and legitimation
r21	L Bucciarelli, N Dworsky	Biographical study of S. Germain, a woman of science in Napoleanic France
r22	L Bucciarelli, L Bryant, C Arterton	Historical perspective on technology assessment

Energy Laboratory:	
r23 Laboratory staff and associated faculty	Areas of concentration: energy management and economics (includes Energy Policy Analysis Group); fossil fuel technology; nuclear technology; environmental technology; electric power technology; end use technology; alternate energy technology. For details on specific policy and assessment projects, consult Energy Laboratory booklet, Objectives, Organization and Programs
1610 ST. JOHN'S SEMINARY COLLEGE Brighton, MA 02135	
Theological Ethics:	
r01 Rev. B Hehir	The Roman Catholic Church and its response to a technological society
Social Ethics:	
r02 Rev. T McDonnell	Pastural problems in a technological society
1630 SOUTHEASTERN MASSACHUSETTS UNIVERSITY North Dartmouth, MA 02747	
Political Science:	
r01 PH Melanson	Impact of professional ethics and epistemic criteria on expertise used in policy decisions
Electrical Engineering:	
r02 J Greaves	Sub-lethal effects of pollutants
1650 UNIVERSITY OF MASSACHUSETTS Amherst, MA 01002	
Center for Environmental Policy Studies:	
r01 R Smardon	Technical review of environmental impact reports
r02 E Zube	Organization, guidance, and direction of State Coastal Review Central
r03 M Ertel	Environmental impacts of out-of-basin river diversion for water supply

1700 WILLIAMS COLLEGE
Williamstown, MA 01267

History of Science:	
r01 D deB Beaver	Sociology of science

MICHIGAN

1770 MICHIGAN STATE UNIVERSITY
East Lansing, MI 48824

Lyman Briggs College (Science Studies):	
r01 R Snow, D Wright	Technology and popular culture: methodology and case studies

1780 UNIVERSITY OF DETROIT
Detroit, MI 48221

Engineering:	
r01 Miranda	Risk structures to natural hazards
r02 Manos	Passenger car vehicle handling and consumer safety
r03 Kieffer	Air pollution over the highway corridors and ambient living
r04 Szmant	Interaction and significance of chemistry and industry development analysis

1790 UNIVERSITY OF MICHIGAN
Ann Arbor, MI 48104

Institute of Public Policy Systems & Political Science:	
r01 R Brunner	Policy research on telecommunications and energy policy
r02 A Kanter	National security policy making process
Institute of Public Policy Systems, Political Science & Sociology:	
r03 J Crecine	Federal resource allocation and budgeting processes

Institute of Public Policy Systems, Program in Engineering for Public Systems, & Industrial & Operations Engineering:	
r04 S Pollock, M Fried	Use of formal analytical tools in public sector decision making, mathematical modeling of processes in the public sector
Institute of Public Policy Systems, Program in Engineering for Public Systems, & Electrical & Computer Engineering:	
r05 W Vivian	U.S. constituency acceptance of energy conservation; public interactive telecommunications with computers
Program in Engineering for Public Systems, Electrical & Computer Engineering:	
r06 K Chen	Decision theory
Program in Engineering for Public Systems & Economics:	
r07 B Birdsall	Economics of crime and poverty
r08 F Stafford	Data base on basic stock-flow variables in the household sector
Program in Engineering for Public Systems & Political Science:	
r09 R Axelrod	Cognitive and mathematical approach to study of policy formation
Center for Research on Utilization of Scientific Knowledge:	
r10 N Caplan	Use of social science information among federal executives in the guidance of national policy
r11 RG Havelock	Theoretical and empirical foundation for research on research utilization
r12 SD Nelson	Development of a set of valid and usefu indicators of the subjective quality of urban life
r13 DC Pelz	Collaboration, with other units of U of Michigan which generate scientific knowledge or technology, in developing programs to translate these outputs int useful applications (other units includ Nursing Research Council, Biological Station, Institute of Social Research's Survey Research Center, Program in Urban Health)

1810 WAYNE STATE UNIVERSITY
Detroit, MI 48202

Department of Political Science:

r01	MS Frankel	Analysis of public policy evolution in the area of human experimentation
r02	MS Frankel	Ethical dimensions of social science research
r03	MS Frankel	Public policy at the state level for implementing advances in genetic technology

MINNESOTA

1830 CARLETON COLLEGE
Northfield, MN 55057

Political Science:

r01	N Vig	Environmental policy, technology assessment

Physics:

r02	B Casper	Adversary approaches to public interest science

Science, Ethics & Public Policy:

r03	I Barbour	Normative components of technology assessment & environmental impact assessment

1840 UNIVERSITY OF MINNESOTA
Minneapolis, MN 55455

History of Science & Technology:

r01	RH Stuewer	History of 20th century physics
r02	ET Layton	19th-20th century history of technology
r03	AE Shapiro	17th century science, especially physics
r04	MJ Kottler	19th-20th century biology

MISSOURI

1890 ST. LOUIS UNIVERSITY
St. Louis, MO 63103

Man, Technology, & Society & History Department:

r01	F Dobney	History of the Corps of Engineers, St. Louis region

Man, Technology & Society & Department of Theological Studies:

r02	D Thomas	Impact of technology on religion and on marriage and family life

Man, Technology, & Society & Political Science:

r03	S Puro	Impact of technology on governmental and judicial system

1920 UNIVERSITY OF MISSOURI-ROLLA
Rolla, MO 65401

Social Sciences Department:

r01	EH Epstein	Social and economic impacts of planned environmental change to control disease
r02	J Ruffner	Effects of technological job characteristics on satisfaction and performance variables (proposed)
r03	V Rao	An input-output analysis of energy alternatives

1930 WASHINGTON UNIVERSITY
St. Louis, MO 63130

Center for Development Technology:

r01	LF Eastwood, JK Gohagan, CT Hill, RP Morgan, et.al.	Earth observation data management systems
r02	RP Morgan, LF Eastwood, et.al.	Application of communications technolog to educational networking
r03	RP Morgan, LF Eastwood, et.al.	Application of communications satellit to educational development
r04	CT Hill, E Greenberg, D Newburger, et.al.	Effect of regulation on innovation in the chemical industry

r05	JPR Falconer, et.al.	Roofing for tropical areas
r06	RP Morgan, D Rothenberg, et.al.	Case studies of innovation in the public service sector
Center for the Biology of Natural Systems:		
r07	B Commoner, et.al.	Analysis of the impact of production technologies on resources and the environment
r08	B Commoner, et.al.	Environmental carcinogens in the workplace and the surrounding community
r09	B Commoner, et.al.	Strategies to reduce the vulnerability of U.S. agriculture to disturbances from energy shortages and price increases
r10	B Commoner, et.al.	Resource material development
r11	B Commoner, et.al.	Energy resource center
r12	B Commoner, et.al.	Cooperative research and training program between the Department of Environmental Conservation of Iran and the Center for the Biology of Natural Systems
r13	D Kohl, O Sexton	A study of the multrum composting waste treatment system
r14	D Kohl, B Commoner, G Shearer	A study of certain ecological and economic consequences of the use of inorganic nitrogen fertilizer

1940 WEBSTER COLLEGE
Webster Groves, MO 63119

Religion:		
r01	G Chamberlain	Relation of technology and values
History:		
r02	M Saleveuris	History of technology
Science:		
r03	W Fuchs	Ecology and technology

NEBRASKA

1980 CREIGHTON UNIVERSITY
Omaha, NE 68178

A grant supports the released time for 6 professors of the university to do research in ethical and religious issues that effect the problems in health care delivery

Theology:

r01 V Peter	The application of the principle of the double effect as it applies to current moral problems in medicine. An attempt to make a common language for science and theology
r02 T Shanahan	The theology of death and dying
r03 R Hauser	Religious values in suffering; patient and health personnel attitudes

Philosophy:

r04 V Walker	The philosophical issues involved in genetic therapy, eugenics, genetic screening, genetic counseling, amniocentesis, and abortion
r05 J Peterkin	Human experimentation, the rights of the subject and the rights of the researcher, consent, risks and benefits the angle of justice with regard to all of these elements that enter into human experimentation

Department of Humanities of the Medical School:

r06 JJ Quinn	Christian values which affect decisions in medical moral issues; a search of scriptures and tradition in order to find principles which will apply to current day problems in medicine

NEVADA

2010 UNIVERSITY OF NEVADA, RENO
Reno, NV 89507

Committee on the Philosophy of Inquiry:

r01 WT Scott	Philosophy of atomic physics (book)

r02	WT Scott	Back of the North Wind: Place for Man in the World View (book)
r03	WT Scott	Two papers on philosophy and history of science
r04	G Ginsburg	The analysis of emotion as an episode of human action
r05	WT Scott	Two Ph.D. candidates in atmospheric physics

Environmental Studies Board:

r06	A Wilcox	Growth problems

NEW JERSEY

2050 PRINCETON UNIVERSITY
Princeton, NJ 08540

Transportation:

r01	PM Lion	Development of a unified metropolitan transit system for Trenton and other areas of the northeast corridor

Center for Environmental Studies & Energy Conversion and Resources:

r02	I Glassman, R Socolow	Technology assessment
r03	I Glassman, R Socolow	Fire control
r04	I Glassman, R Socolow	Home design for energy and environmental conservation

History & Philosophy of Science:

r05	T Gelfand	History of medicine
r06	GL Geison	History of medicine and life sciences
r07	CC Gillispie	History of science since 1750, science and society in revolutionary France
r08	TS Kuhn	History of modern physics, theories of scientific knowledge
r09	MS Mahoney	History of science from antiquity to 1700
r10	P Benacerraf	Philosophy of mathematics
r11	JP Burgess	Logic and philosophy of mathematics

r12	RC Jeffrey	Philosophy of science
r13	DK Lewis	Philosophy of science
r14	C Glymour	Philosophy of physics

2080 STEVENS INSTITUTE OF TECHNOLOGY
Hoboken, NJ 07030

Center for Municipal Studies & Services:

r01	SF Borg	Study of new environmental impact analysis requirements as they affect the city of Hoboken

2090 UPSALA COLLEGE
East Orange, NJ 07019

Chemistry:

r01	DK McGuire	The nature of the energy crisis

Sociology:

r02	SR Hiltz	The effect of the energy crisis on life style

NEW MEXICO

2110 UNIVERSITY OF NEW MEXICO
Albuquerque, NM 87131

Program for Advanced Study in Public Science & Administration:

r01	A Rosenthal	Study of methods of evaluating federal resource programs

NEW YORK

2130 ALFRED UNIVERSITY
Alfred, NY 14802

Political Science:

r01	Peterson	Bio-politics; future technology and its ramifications
r02	T Rasmussen	Politics and the environment

Psychology:

r03	Johnson	Computer applications to the social services

2170 CITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
New York, NY 10031

Program in Health, Medicine & Society: r01 R Belmar	International comparison of health status as correlated with socio-economic indicators
Program on Health, Medicine & Society & History: r02 T Brown	Changing public attitudes towards the medical profession; the uses and misuses of science by the medical profession
Program on Health, Medicine & Society & Sociology: r03 D Light	The socialization of psychiatrists and medical students
Civil Engineering: r04 W Rand	Basic aspects of diversity; interdisciplinary reference and coordinate systems

2200 COLUMBIA UNIVERSITY
New York, NY 10027

Civil Engineering & Department of Graphics: r01 WR Spillers, S Al-Banna	The introduction of humanistic variables in urban design by computer; report done on the project "Welfare Island as a Multidisciplinary Design Project"
Electrical Engineering: r02 B Gilchrist	The general area of computers and society; in particular, the effects of government "regulation" and the structure of the industry on how society is impacted by the computer
Sociology (joint project with other universities): r03 H Zuckerman	The emergence of bacterial genetics as a case of possibly delayed scientific development; study is part of a more general program of study of the problematics for the historical sociology of science
Sociology: r04 RK Merton	The sociology of science

Department of History:	
r05 L Graham	History of science in Russia; two books have been published in this field: The Soviet Academy of Sciences, 1927-1932 and Science and Philosophy in the Soviet Union
Mechanical Engineering:	
r06 RT Taussig, DA Mongitore	Solar energy applications and related legislation
Business:	
r07 ES Savas	Joint Soviet-American program for application of computers to the management of large cities
Law:	
r08 FP Grad	Regulation of the environmental impact of the automobile
Conservation of Human Resources:	
r09 E Ginzberg	Economic impact of NASA program

2210 COLUMBIA UNIVERSITY SCHOOL OF PUBLIC HEALTH
New York, NY 10027

Public Health:	
r01 FR Gearing	Evaluation of methadone maintenance treatment
r02 PN Borsky	Reactions of people to aircraft noise and other environmental noise
Faculty of Medicine:	
r03 H Fruchtbaum	Public health and U.S. foreign policy, 1898-1910; population and social order in American thought

2220 CORNELL UNIVERSITY
Ithaca, NY 14853

Program on Science, Technology, & Society:	
r01 FA Long, D Nelkin, L Scheinman	Science policy development in France and Germany and its relevance to U.S. science policy
r02 SM Brown, Jr.	Informed consent in biomedical research
r03 D Nelkin	Scientific and anti-scientific values in U.S. society in relation to science education

r04	M Black	The scope and limits of rational decision making
r05	E Blackstone, R Bowers, J Frey, K Hanslowe, C Hershey, A Meyburg, TJ Pempel, et.al.	Technology assessment in the area of mobile communications
r06	J Milch	Intergovernmental relations and public participation in aviation planning
r07	ED Heitowit, R Bowers, SM Brown, Jr.	Survey and analysis of curriculum innovation in the area of science, technology, and society
Program on Science, Technology, & Society & Peace Studies Program:		
r08	FA Long, J Reppy	An analysis of the independent research and development program of the Department of Defense
Peace Studies Program:		
r09	L Scheinman, PL Auer, et.al.	International cooperation in research and development on new sources of energy
r10	L Scheinman, R Rosecrance, G Quester, M Leitenberg, et.al.	Arms control and disarmament
Research Program on Social Analyses of Science Systems:		
r11	R McGinnis, DH White, et.al.	Cohort study of graduate education and career patterns in science
r12	R McGinnis, DH White, et.al.	Specialty study in five scientific areas using funding, productivity, and demographic data
Program on Policies for Science & Technology in Developing Nations:		
r13	F Slate, et.al.	Low-cost housing in developing nations
r14	L Irwin	Low-cost transportation in developing nations
r15	FJ Ahimaz, R Seidel, TE Davis, L Good, J Ingles	Science and technology policies in developing nations
r16	WF Whyte	The impacts of the international research institutes
Agricultural Economics:		
r17	RJ Kalter	Evaluation of alternative energy leasing strategies and schedules for federal land and the outer continental shelf

r18 JW Mellor	Analysis of direct and indirect effects of technological change in agriculture
Entomology:	
r19 D Pimentel	Energy/environmental systems: an experiment in multidisciplinary training
History:	
r20 WB Provine	Genetics in relation to evolution: 1900-1959
Center for Environmental Quality Management:	
r21 N Orloff	Environmental impact statement assessment
2230 CORNING COMMUNITY COLLEGE Corning, NY 14830	
Biology-Chemistry Division:	
r01 J Vikin	Evaluation of external factors affecting the growth of science and technology
2250 FORDHAM UNIVERSITY Bronx, NY 10458	
Economics:	
r01 M Parvin	Relationship between components of technology
2270 HAMILTON COLLEGE Clinton, NY 13323	
German:	
r01 S Weiss	Enlargement and development of doctoral dissertation on scientists in late 19th and 20th century German literature: problems, projects, and personalities
Economics:	
r02 R Allen	Coke smelting in the western iron industry, 1850-1880; the efficiency of the French iron industry in the 19th century; evaluation of technical improvements in the British iron industry 1850-1875
Psychology (Kirkland College):	
r03 D Sherrod	Aspects of environmental stress and behavior

Government (Kirkland College):		
r04	J Ross	Editing and authoring a volume on "Revolution in Post-Industrial Society"
Philosophy:		
r05	R Simon	Ethical problems arising from the abortion laws
Economics:		
r06	D Jones	A comparative ability of the producer cooperatives and private enterprise firms to undertake innovation in small British enterprises
Government:		
r07	RP Suttmeier	Conceptual frameworks for the study of science, technology, and public policy; the role of science and technology in modernization; the role of science in advanced industrial societies

2300 IONA COLLEGE
New Rochelle, NY 10801

Biology:		
r01	GS Pappas	The cultural evolution of biology and the effect on society

2350 LE MOYNE COLLEGE
Syracuse, NY 13214

Religious Studies & Biology:		
r01	A Szebenyi	Article on the matter of Christian bioethics is in preparation
English:		
r02	G Boudreau	Thoreau, nature, language, social criticism, genesis of natural and artistic expressions, ecological conscience
History:		
r03	W Bosch	Attitudinal study of negative attitudes in U.S. toward science and technology: 1918-1945

2360 MANHATTAN COLLEGE
Bronx, NY 10471

Environmental Studies/Environmental Action Council:	
r01 D Pirone, J Alcamo, N Verna	Hudson River ecology and human impact on the system; Long Island Sound ecolog

2400 RENSSELAER POLYTECHNIC INSTITUTE
Troy, NY 12181

History & Political Science:	
r01 D Livingston	Design of alternative world futures; international environmental problems; images of the future in science fiction
Human Dimensions Center:	
r02 J Koller	Relations between science and religion; development of alternative future religions
r03 J Koller	Relations between values and technology in India

2450 SOUTHAMPTON COLLEGE OF LONG ISLAND UNIVERSITY
Southampton, NY 11968

Physics:	
r01 J Andrews	Advantages in coupling different energy sources (wind, solar)

2460 STATE UNIVERSITY OF NEW YORK AT ALBANY
Albany, NY 12222

Science & Technology Studies:	
r01 JJ Bulloff	Hazardous material spill amelioration; surprise-free technological forecasting

2470 STATE UNIVERSITY OF NEW YORK AT BINGHAMTON
Binghamton, NY 13901

Center for Integrative Studies:	
r01 J McHale	Futurology
School of Advanced Technology & Economics:	
r02 H Hellerman, B Chinitz	Manpower implications of revenue shari
Economics:	
r03 L Yap	Social aspects of transportation

2480 STATE UNIVERSITY OF NEW YORK AT BUFFALO
Buffalo, NY 14214

Civil & Industrial Engineering:

r01	GC Lee	Development of a socio-engineering program; alternative land use future for the city of Buffalo
r02	RC Paaswell, WW Reeker	Problems of the carless--accessibility of health care services

2490 STATE UNIVERSITY OF NEW YORK AT STONY BROOK
Stony Brook, NY 11794

History Department:

r01	R Cowan	Study of development and impact of household technology--U.S. 20th century

Philosophy Department:

r02	P Heelan	Philosophy of science, phenomenology of physics, philosophy of medicine
r03	M Spector	Relativity theory, models in science
r04	R Sternfeld	Logical theory and philosophy of science
r05	D Ihde	Philosophy and phenomenology of technology, human-machine relations

2500 STATE UNIVERSITY OF NEW YORK COLLEGE AT CORTLAND
Cortland, NY 13045

Physics:

r01	H Bleeker	Common epistemological themes that direct the evolution of the disciplines

2510 STATE UNIVERSITY OF NEW YORK COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY
Syracuse, NY 13210

Institute of Environmental Program Affairs, School of Landscape Architecture, Silviculture & Forest Influences:

r01	D Behrend, D Harper, R Marler, P Black	Environmental assessment techniques for conducting impact studies

Adirondack Ecological Center, Applied Forestry Research Institute, Forest Botany & Pathology, Forest Zoology, Managerial & Social Sciences, Silviculture & Forest Influences:

r02	W Tierson, G Mattfeld, R Brocke, R Chambers, R Nyland, G Armstrong, D Muller-Schwarze, R Marler	Forest management-wildlife management relationships including ecology, aesthetics, economics

2540 STATE UNIVERSITY OF NEW YORK COLLEGE AT PLATTSBURGH
Plattsburgh, NY 12901

Science:

r01	S Worrall	Basic theory of science and society; attitudes in U.S. Senate to science and society

2580 SYRACUSE UNIVERSITY
Syracuse, NY 13210

Public Administration:

r01	JD Carroll, CR Knerr, Jr.	Confidentiality of social science research sources and data

2620 VASSAR COLLEGE
Poughkeepsie, NY 12601

Multidisciplinary Program in Science, Technology, & Society:

r01	J Farganis	On critical theory and Frankfurt Schoo
r02	S Rousseas	Paradigm Polishing vs. Critical Though in Economics (American Economist, Fall 1973), based on Kuhn; research in area of the sociological and political implications of the No-Growth Society
r03	E Loebl	Research program encompassing both the theory and practical side of controlli the orientation of a mature society (applied for a grant for this work to the Rockefeller Foundation)
r04	D Weinberg	The economics of nuclear energy

NORTH CAROLINA

2670 DUKE UNIVERSITY
Durham, NC 27706

Urban & Environmental Engineering:

r01 J Dajani	The role of air transport in urban transportation
r02 D Warner & J Dajani	Evaluating impacts of community water supply systems

Mechanical Engineering:

r03 JB Chaddock	Energy/policy

2690 NORTH CAROLINA STATE UNIVERSITY
Raleigh, NC 27607

Chemical Engineering, Engineering Science & Mechanics, & Mechanical & Aerospace Engineering:

r01 W Griffith, J Ferrell, N Ozisik, J Doolittle, C Maday, Y Sorrell	System optimization using computer-based modeling techniques to balance technical and economic values with environmental values in power plant siting and cooling designs

Civil Engineering & Mechanical & Aerospace Engineering:

r02 J Whitfield, D Dean, W Griffith	The social, political, and legal aspects of introducing a well-engineered small vehicle into urban use for short individual trips

Nuclear Engineering:

r03 RL Murray	Energy forecasting methods related to the next 25 years' growth in Piedmont, NC, including a classification system for energy types and forms and a presentation of information on energy for use by planners and public officials

Zoology

r04 GG Shaw	Development of strategies for assessing impacts of growth forces on the Piedmont region biological components over the next 25 years

NORTH DAKOTA

2740 NORTH DAKOTA STATE UNIVERSITY
Fargo, ND 58102

Agricultural Economics:

r01	FL Leistritz, TA Hertsgaard	Economic impact of coal development in the Northern Plains

Sociology:

r02	EC Schriner	Sociological impact of coal development in the Northern Plains
r03	BB Brunton	Effect of industrial development on Indians in North Dakota

OHIO

2760 CASE WESTERN RESERVE UNIVERSITY
Cleveland, OH 44106

History of Science & Technology:

r01	RE Schofield	Natural philosophy from the 17th century; biography of Priestley; anthology of humanities and science readings (with WC Williams)
r02	ET Layton	Interaction of science and technology in America; professionalization and institutionalization of American technology
r03	RV Jenkins	Photographic technology and business in the 19th and early 20th centuries
r04	G Miller	Study of the biological and medical sciences; survey of teaching of histor of medicine in medical schools in the U.S. and Canada
r05	RP Gerstner	History of geology
r06	WC Williams	Dissertation on the 19th century British zoologist, Richard Owen; study of romanticism and the biological sciences

Political Science:

r07	TD Long	Comparative science and technology policies of industrialized nations

2810 OHIO STATE UNIVERSITY
Columbus, OH 43210

Industrial Design: r01 J Rheinfrank	Research in science policy as related to theories of science; generation of global moral and ethical commitments from investigation of global policy making
Sociology: r02 E Quarantelli, R Dynes	Disaster research center
Political Science: r03 S Thorson	The utilization of the behavioral sciences in long range forecasting and policy planning

2820 OHIO UNIVERSITY
Athens, OH 45701

Industrial & Systems Engineering: r01 C Overby	Transportation-communication interactions studies exploring some of the tradecrafts--(1) employment potential for travel of handicapped persons, (2) energy and materials

2830 UNIVERSITY OF DAYTON
Dayton, OH 45469

Research Institute, Technological Forecasting Group: r01 RC Lenz, Jr., JP Martino, et.al.	Survey of innovative concepts in particular fields of technology

OKLAHOMA

2880 OKLAHOMA STATE UNIVERSITY
Stillwater, OK 74074

Program in Local Government Technology: r01 JE Shamblin, E Ferguson, CB Estes, DF Kincannon	Various projects in local government technology
Program in System Science: r02 BL Bascore	Energy as a base for taxation

2900 UNIVERSITY OF OKLAHOMA
Norman, OK 73069

Electrical Engineering:

r01	LW Zelby	Energy generation (non-polluting sources) and utilization; energy and freight haul

Science & Public Policy Program:

r02	DE Kash, IL White	Technology assessment of outer continental shelf oil and gas operations
r03	IL White, DE Kash	North Sea oil and gas
r04	IL White, MA Chartock, RL Leonard	Coal and oil shale resource development systems
r05	DE Kash	Methodology and documentation for consistent analysis of energy alternatives for environmental impact statements
r06	DE Kash, MD Devine	Energy systems analysis of alternative resource options

OREGON

2930 OREGON STATE UNIVERSITY
Corvallis, OR 97331

Civil Engineering:

r01	DH Bella	Environmental decision making strategies

2940 PORTLAND STATE UNIVERSITY
Portland, OR 97207

Systems Science Program:

r01	RC Duncan	The ORE plan for energy efficient household waste management
r02	HA Linstone	The problem of discounting the future
r03	W Wakeland	QSIM--a low budget approach to modeling and forecasting
r04	K Yee	Bayesian inquiry: a general approach for the use of experts

2980 UNIVERSITY OF PORTLAND
Portland, OR 97203

Physical & Life Sciences:

r01	M Snow, W Fyffe	Research on the zoobenthos of the Columbia River at Mile 24; data obtained will be part of an environmental impact study on the effects of U.S. Corps of Engineering channel dredging in the Columbia River

PENNSYLVANIA

3020 BUCKNELL UNIVERSITY
Lewisburg, PA 17837

Mechanical Engineering:

r01	JN Zaiser	World energy model

3030 CARNEGIE-MELLON UNIVERSITY
Pittsburgh, PA 15213

Engineering & Public Affairs:

r01	RW Dunlap	Environmental-energy aspects of materials production and processing; policy and institutional arrangements to implement technical decisions by government (local, regional, state, national)
r02	SW Angrist	Trends in energy requirements and patterns of usage; non-fuel energy resources (tidal, wind, solar, hydroelectric); resource allocation
r03	MJ Massey	Application of basic chemical engineering problem solving skills to technical and social problems; coal processing technology assessment with emphasis placed on relationships between process configuration and environmental impact
r04	FC McMichael	Roles of local regulatory agencies in urban watershed management
r05	CA Mitchell	The role of the expert witness in product liability trials; policy problems dealing with the enforcement of environmental legislation

r06 MG Morgan	Methodologies for estimating the societal costs and benefits of technologies; estimation of the environmental effects of the energy system; computers, communication technology, and society
r07 HR Piehler, AS Weinstein	Interaction of technology and law in societal decision making, with special interest in product liability
r08 ES Rubin, FC McMichael	Priorities for R&D policy in coal research; environmental assessments of processes for producing clean fuels from coal

Technology & Humanities Program:

r09 JA Tarr, R Dunlap, et.al.	Joint research between engineers and humanists in the area of retrospective technology assessment

3060 DREXEL UNIVERSITY
Philadelphia, PA 19104

Management:

r01 JA Rafaele	Social control of technology

History & Politics:

r02 CO Smith	History of the engineering profession

3080 DUQUESNE UNIVERSITY SCHOOL OF LAW
Pittsburgh, PA 15219

School of Law:

r01 WA Donaher	Law and technology in litigation

3090 EAST STROUDSBURG STATE COLLEGE
East Stroudsburg, PA 18301

Institute for Environmental Studies:

r01 LM Rymon, RK Salch, et.al.	Regional energy utilizations
r02 LM Rymon, D Campbell	Natural and sociological impact of Tocks Island Dam construction

3120 KING'S COLLEGE
Wilkes-Barre, PA 18711

Sociology:

r01 D Eisenhower	Expenditures for technological development and economic crisis

3140 LAFAYETTE COLLEGE
Easton, PA 18042

Engineering Science:

r01 CL Best	Identification and modeling of the mechanisms by which technical input enters the public policy making process in comparative governments

3150 LEHIGH UNIVERSITY
Bethlehem, PA 18015

International Science & Technology Affairs:

r01 ZJ Slouka	Significance of international dimensions of engineering education

International Science & Technology Affairs, International Studies Program, & Center for Health Sciences:

r02 TC Cheng, A Cohen, JH Ellis, L Juda (Muhlenberg College), JR McNamara, G Olson (Moravian College), ZJ Slouka, RC Williamson	Socio-economic assessment of schisosomiasis control (project developed; not yet funded)

Transnational Dimensions of International Studies, International Studies Program:

r03 MR Hodges, J Parks, AF Richards	Corporate strategies in deep ocean mining (project being developed)

3190 PENNSYLVANIA STATE UNIVERSITY--ALLENTOWN CAMPUS
Fogelsville, PA 18051

Humanities:

r01 RN DeVinney, W Emkey	Thermodynamics, art, poetry, and the environment

3200 PENNSYLVANIA STATE UNIVERSITY
University Park, PA 16802

Science, Technology & Society Program:

r01	R Roy	Equipping the engineering community for public understanding of technology activities
r02	C Humphrey	Technology, social organization, and th destruction of wilderness; the west branch of the Susquehanna
r03	R Price	The concept of wilderness in America: semantics, science, and social change; ethics of allocation of scarce resource
r04	D Verene	Analysis of technological consciousness and the relationship of technology to human values and the to humanistic imagination and myth
r05	KP Wilkinson	Regional studies on social changes accompanying economic and technological development
r06	S Goldman	Renaissance nature, philosophy, and technology, and the origins of modern science
r07	P Becker	Development of courses with television component to be offered to general public and to university students in resident instruction programs
r08	R Heinsohn	Study of how technology changes man's values

Science Advisory Information for State Legislators:

r09	R Roy	Motion picture film depicting various aspects and activities of the science advisory and development program in Pennsylvania to demonstrate the value of such a program and encourage simila enterprises in other states

3230 TEMPLE UNIVERSITY
Philadelphia, PA 19122

Physics:

r01	GF Wheeler	Study of changes in our ethical system due to technological changes in our society

3250 UNIVERSITY OF PENNSYLVANIA
Philadelphia, PA 19174

History & Sociology of Science:

r01 AW Thackray	Science, technology, and the industrial revolution
r02 TP Hughes	History of electric light and power systems: 1880-1940
r03 RE Kohler	Biochemistry, biomedicine and their patrons, 1914-1940
r04 MB Adams	Development of biology and genetics in the Soviet Union

3260 UNIVERSITY OF PITTSBURGH
Pittsburgh, PA 15260

Psychological Physics Research Program:

r01 RA McConnell	Investigation of extrasensory perception and psychokinesis and of psychological resistance thereto at the upper socio-economic level

RHODE ISLAND

3310 BROWN UNIVERSITY
Providence, RI 02912

History:

r01 AH Dupree	Science in government; history of measurement; biological and social theories

American Civilization Program & History:

r02 P Malone	Old Slater Mill Museum

SOUTH CAROLINA

3330 CONVERSE COLLEGE
Spartanburg, SC 29301

Center for the Humanities:

r01 MH Goldberg	Technological change, human values, and future studies

3350 UNIVERSITY OF SOUTH CAROLINA
Columbia, SC 29208

Baruch Institute for Marine Biology & Coastal Research:

r01 JM Dean	Public and user oriented marine science education

Geography:

r02 R Lloye	Strip mining perception

Government & International Studies:

r03 H Silverstein	International organizations and ocean policy

TENNESSEE

3420 MARYVILLE COLLEGE
Maryville, TN 37801

Science, Values & Society:

r01 D Young	Biomedical ethics (physical manipulati of the brain, genetic manipulation, drugs, life maintenance)

Project on Futuristics:

r02 D Young	Alternative technologies and life styles

3430 VANDERBILT UNIVERSITY
Nashville, TN 37235

EWRE/Socio-Engineering Program:

r01 FL Parker, et.al.	Benefit/costs analysis of thermal pollution

Socio-Engineering Program:

r02 B Lichter, et.al.	Technology assessment of strategies for electrical power reduction in NES/TVA Region
r03 B Lichter, W Flanagan	Democratic participation in technological decision making
r04 R Goodrich	The role of futurism in higher education
r05 R Nash	Mathematical descriptions of temperature in buildings: seeking to minimize energy and power requirements simultaneously

Socio-Engineering Program & Civil Engineering:

r06	D Brown	Analysis of transportation system patterns in Nashville/Davidson County

Vanderbilt Institute for Public Policy Studies & School of Nursing:

r07	J Laben	Study of policy alternatives regarding alcohol laws and treatment programs

TEXAS

3490 NORTH TEXAS STATE UNIVERSITY
Denton, TX 76203

Economics:

r01	MJ Davidson	New institution to advance technological innovation

3510 SOUTHERN METHODIST UNIVERSITY
Dallas, TX 75275

Philosophy:

r01	R Zaner, D Hausman, AS Kappler	Issues in medical ethics and philosophy of medicine

Law:

r02	H Taubenfeld, R Taubenfeld	Societal implications of intentional weather modification

3540 TEXAS A&M UNIVERSITY
College Station, TX 77843

Center for Urban Programs:

r01	S Riter	Public technology assistance to municipalities

Texas Transportation Institute:

r02	S Bridges	Transportation policy alternatives for Texas and related energy policies
r03	D Barke, VG Stover	Transportation, people, and planning
r04	M Radke	Energy conservation for local governments

Philosophy:

r05	RW Burch	Moral rights of experiment subjects
r06	MM Davenport	Political philosophy in developing nations

3550 TEXAS TECH UNIVERSITY
Lubbock, TX 79409

Psychology:

r01	C Halcomb	Development of new methodological approaches to the study of human factor problems (related to the operation of industrial and military equipment and machinery)

VIRGINIA

3660 CHRISTOPHER NEWPORT COLLEGE
Newport News, VA 23606

Physics:

r01	AM Buoncristiani	Arms control
r02	JC Webb, GR Webb	Studies on the nature of power and control

3690 UNIVERSITY OF VIRGINIA
Charlottesville, VA 22903

Environmental Sciences:

r01	CI Aspliden, M Garstang, R Pielke	Wind energy and its power potential in Virginia
r02	JM Simpson, M Garstang	Evaluation and design of weather modification
r03	SS Skjei	Impact of public utility prices on community development
r04	WA Wallace	Conflicting national claims to resources of the continental shelf
r05	SF Singer	Optimum population levels in relation to resources and environment

Government & Foreign Affairs:

r06	E Wonder	Uranium enrichment in American-European relations

School of Engineering & Applied Science:

r07	JE Gibson	A systemic approach to a new city design (interdisciplinary, socially-relevant, large scale system analysis)

3710 UNIVERSITY OF VIRGINIA, VIRGINIA INSTITUTE OF MARINE SCIENCE
Gloucester Point, VA 23062

Marine Science & Marine Affairs:

r01	NB Theberge	Legal implications of surf clam management (interrelationship of scientific and legal constraints)
r02	WJ Hargis, Jr., MP Lynch	Marine policy studies

3720 VIRGINIA MILITARY INSTITUTE
Lexington, VA 24450

Economics:

r01	JA Zellner	Behavior of regulatory commissions
r02	JB McFadyen	Regional and state manufacturing structures

3730 VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Blacksburg, VA 24061

History:

r01	R Schallenberg	19th and early 20th century industrial technology and engineering
r02	H LeGrand	History of chemistry

Philosophy:

r03	CE Cardwell	Philosophical foundations of natural science; creativity in art and science; Pierre Duhem
r04	JC Pitt	Scientific revolutions; Galileo
r05	RD Rosenkrantz	Problem of induction, ethics, and science

WASHINGTON

3750 UNIVERSITY OF WASHINGTON
Seattle, WA 98195

Graduate School of Public Affairs:

r01	BC Denny	International scientific and technological cooperation
r02	M Hashimoto	Employed inventors and the rate of inventive activity

r03	RH Pealy	Institutional arrangements for water development and environmental protection in the State of Washington
r04	D Wolfle	Training and utilization of scientific and technical personnel
Institute for Marine Studies:		
r05	JA Crutchfield	Economic effect of oil pollution in marine and estaurine waters of Washington; techniques for evaluating conflicting uses of the marine environment
r06	DL McKernan	Anticipated development rates in marine mining and hydrocarbon extraction and impact on fisheries production; study of means by which specific marine technologies may be transferred to developing states
r07	E Wenk, Jr.	Policy research on technologically-intensive marine issues
Program in Social Management of Technology:		
r08	E Wenk, Jr., et.al.	Methodology in technology policy analysis
r09	P Bereano	Women and technology; intermediate technology
r10	B Hyman	Energy and materials conservation
r11	E Wenk	Federal organization for science and technology; technology assessment
r12	R Zerbe	Regulation and technology
Institute for Environment Studies:		
r13	GW Cormick, JE McCarthy	Environmental mediation
r14	JA Crutchfield, E Sheets	Energy and growth in the Pacific Northwest

WEST VIRGINIA

3800 WEST VIRGINIA UNIVERSITY
Morgantown, WV 26506

Technology in the Victorian Era:		
r01	E Kemp	Survey and recording of 19th century engineering technology in West Virginia

3810 WEST VIRGINIA UNIVERSITY LAW CENTER
Morgantown, WV 26506

Law:	
r01 JT Phillips	Moral, ethical, and legal problems in medicine

WISCONSIN

3860 RIPON COLLEGE
Ripon, WI 54971

Art:	
r01 EM Breithaupt	Technology and its impact on the art institution

3930 MEDICAL COLLEGE OF WISCONSIN
Milwaukee, WI 53233

Surgery:	
r01 HM Kaufman	Ethical aspects of transplant surgery
r02 D Lepley	Quality of life in coronary bypass surgery
Obstetrics/Gynecology:	
r03 RF Mattingly	Ethical aspects of abortion and sterilization

3950 UNIVERSITY OF WISCONSIN-STOUT
Menomonie, WI 54751

Future Studies:	
r01 L Smalley	Results of future studies; research/development of instructional materials for public school teachers in technological areas

PUERTO RICO

3980 UNIVERSITY OF PUERTO RICO SCHOOL OF LAW
Rio Piedras, PR 00931

Institute of Public Policy & Law:	
r01	Development of basis for regional eco-management in Puerto Rico
r02	Role of socio-cultural values in the future of Puerto Rico

r03

Feasibility of developing a "real progress index" for Puerto Rico

II. RESEARCH, GOVERNMENT, AND PROFESSIONAL INSTITUTIONS

A. RESEARCH INSTITUTES: A SELECTED LIST

ARCHIVES OF INSTITUTIONAL CHANGE
Wallpack Village, NJ 07881

The Archives of Institutional Change conducts continuing assessments of the response of contemporary institutions to social needs, topic by topic, each with the advice of a distinguished specialist. Planned projects include: (1) institutions of public opinion and citizens' communications (advisor: Robert Weller, Humanities Department, U.S. Naval Academy, Annapolis, MD); (2) medicine as an institution (advisor: Carleton Dallery, Philosophy Department, State University of New York at Stony Brook); and (3) general trends in social change (advisor to be selected). Publications include: (1) Prometheus, a bimonthly journal; (2) The Bankruptcy of Academic Policy (1972), which discusses problems of planning in higher education; (3) Scientific Institutions of the Future (1972); (4) Talent Waste: How Institutions of Learning Misdirect Human Resources (1972); (5) Documenting Change in the Institutions of Knowledge; A Prometheus Bibliography (1973); (6) Let the Entire Community Become Our University and a supplement, National Register of Internships and Experiential Education (both 1973); and (7) Technology as Institutionally Related to Human Values (1974). 1972 and 1973 titles are published as paperbacks at $3.95; the 1974 title is in cloth at $10 and is available from the Archives or from Acropolis Books, 2400 17th St., NW, Washington, DC 20009.

ASPEN INSTITUTE FOR HUMANISTIC STUDIES
Program in Science, Technology and Humanism (STH)
PO Box 3000
Boulder, CO 80303
Director: Walter Orr Roberts

The primary purpose of the Aspen STH is to find various ways to focus the collective efforts of public leaders, humanists, and the members of the scientific, engineering, and business communities upon problems that relate to the humanistic use of science and technology. Broad topics of interest include: (1) values and decisions--public choices, and (2) humanistic values and the nature of scientific knowledge. The Guglielmo Marconi Fellowships Program commissions studies by fellows selected from the sciences, engineering, the humanities, the business world, or public life. The awards commission an author to undertake an analysis of the application of some aspect of science or technology to human well-being. Activities of the STH include action-oriented seminars, with published proceedings, books, reports, and "white papers," and workshops on policy implications.

BATTELLE MEMORIAL INSTITUTE
505 King Ave.
Columbus, OH 43201

Battelle's STS related activities are conducted at 8 laboratories and research centers located throughout the country. Current projects focus on technical aspects of the environment, energy generation and consumption, food and agriculture, biomedical engineering, manufacturing technology, and community life. The last category includes research in rapid transit systems, airport siting, computer applications for local government use, and the role of West German citizens' groups in nuclear power plant siting.

The majority of projects are directed toward problems that are in need of immediate solution. There are a few projects, however, dealing with more long-term problems and solutions. The stated purposes of Battelle include: (1) scientific research and development; (2) creation of activities of a scientific nature; (3) education in connection with all the foregoing activity; and (4) in further areas of the above, the reduction to practice, licensing, or other disposal of inventions, discoveries, and developments. Patents, papers published, and activities are listed annually and a copy of this list of publications is available upon request.

The Human Affairs Research Centers (HARC) in Seattle have been established to increase and focus Battelle's capabilities for research and development directed toward the solution of societal problems. HARC includes 5 individual study centers: the Population Study Center, the Law and Justice Study Center, the Health Care Study Center, the Social Change Study Center, the Science and Government Study Center, and a Special Projects Section. The Battelle Center in Frankfurt includes a technology assessment group.

THE BROOKINGS INSTITUTION
1775 Massachusetts Ave., NW
Washington, DC 20036

The Brookings Institution is a private, non-profit organization devoted to research, education, and publication. Its activities are carried out through 3 research programs (Economic Studies, Governmental Studies, Foreign Policy Studies), an Advanced Study Program, a Social Science Computation Center, and a Publications Program.

Through its conferences, seminars, round tables, and other educational activities, the Advanced Study Program aids leaders in government, business, and the professions in understanding public policy issues. "Conferences in Issues in Science and Technology" are held 4 times yearly in Williamsburg, Virginia, for senior government scientists, administrators of government science programs, and engineering executives. In addition, special programs and seminars are held for federal agencies, and members of Congress and their staffs in cooperation with the Congressional Research Service and with the AAAS.

Publications include: books that result from the institution's research and conferences; short research reports that present a summary of the books; and reprints from professional journals of selected articles by staff members. The institution publishes a Biennial Report and the Brookings Bulletin, a quarterly, to report on its activities. A program brochure, a list of books in print, and a descriptive book catalog are issued annually.

CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES
Program on Science, Technology, and Society (POSTS)
202 Junipero Serra Blvd.
Stanford, CA 94305
Coordinator: Paul Armer

The Center for Advanced Study in the Behavioral Sciences conducts a fellowship program for distinguished scholars in fields that illuminate the question of how people and societies behave. Each year about 50 scholars participate, working at the center for the academic year. The scope of the POSTS program covers a number of complex topics, usually involving specific technologies and policies. The program molds small groups of fellows each year around several core topics, as well as providing fellowships for independent projects. (POSTS is due to terminate at the end of the 1975-76 year.)

Past project areas include: race, development, and performance: a reanalysis; air pollution decision making; social and political effects of advances in biology and medicine; social implications of computer technology; economic analysis of recycling; the scope and limitations of artificial intelligence; historical sociology of scientific knowledge; arms control and disarmament; the U.S. federal budget process; the FCC and broadcast licensing; and health care. These projects are described in greater detail in the POSTS general report.

CENTER FOR POLICY RESEARCH, INC. (CPR)
475 Riverside Dr.
New York, NY 10027

CPR is a non-profit, government and foundation supported corporation directed by Dr. Amitai Etzioni. It was formed to evaluate and provide consulting services on public policy matters, train researchers in policy research, and contribute to the development of technologies necessary for the implementation of social policies.

Full-time staff researchers include sociologists who founded the center, psychologists, economists, lawyers, engineers, etc.

Public policy areas under study include health and society and technology and society. Project MINERVA (Multiple Input Network for Evaluatory Reactors, Votes, and Attitudes) is a study of ways to use new communications technologies to approximate attitudes of participatory democracy for mass societies. New projects include a study of alternative models of health information systems.

CPR sponsors a Summer Institute in Policy Research funded by NSF. The goal of this institute is to train new social scientists in research and policy analysis and to develop an intellectual synthesis between research and policy formation. CPR publishes a number of papers, books, and reports. A complete list of publications is available upon request.

THE COUNCIL FOR PHILOSOPHICAL STUDIES (CPS)
Skinner Hall 1131
University of Maryland
College Park, MD 20742

In the summer of 1974, CPS conducted an Institute on Moral Problems in Medicine for faculty members in philosophy, law, medicine, and the biological sciences. As an outgrowth of that institute, CPS produced an annotated bibliography of films and videotapes relevant to the teaching of medical ethics. This list is available upon request.

FORECASTING INTERNATIONAL (FI)
1001 North Highland St.
Arlington, VA 22201

FI is a private research organization established to work with industry and government in the areas of technological forecasting, technology assessment, and the quantification and analysis of subjective judgments. FI offers 3 types of services: consultation, organization of seminars and workshops, and execution of specific tasks, generally in the area of technology assessment and forecasting. Recent research includes an NSF-funded project involving the ranking of technological innovations by various impact criteria, an identification of energy supply and demand of the European Economic Community, an evaluation of the coal extraction technology, and a study of the future of the scientific journal. Reports of many FI projects have been published and a list is available upon request.

THE FUTURES GROUP
124 Hebron Ave.
Glastonbury, CT 06033

The Futures Group is a management consulting firm with an emphasis on forecasting. In addition to consulting, the group performs contract studies, provides for seminars and lectures on subjects related to planning, policy assessment, and futures research, and offers data services. A data bank of forecasts from a variety of sources is maintained and made available to clients. The group has developed a new service, PROSPECTS, which consists of a series of reports on the future of a number of industries, beginning with the pharmaceutical industry. Reports will include discussion of contemporary issues which will affect the industry under study. Clients include industry, government agencies, foundations, and universities.

HOLCOMB RESEARCH INSTITUTE
Butler University
Indianapolis, IN 46208

The Holcomb Research Institute was created to promote, engage in, and finance scientific research and education, particularly in areas with social impact. The institute is closely involved with the Scientific Committee on Problems in the Environment (SCOPE) and with Butler University. Research projects concerned with the environmental problems of Indianapolis and Indiana are planned.

SCOPE publications are available from the institute. Titles include Global Environmental Monitoring, Man Made Lakes as Modified Ecosystems, and Environment and Development.

HUDSON INSTITUTE, INC.
Quaker Ridge Rd.
Croton-on-Hudson, NY 10520

The Hudson Institute is a private, non-profit research organization specializing in the study of current and future public policy choices. Many projects focus on national security related issues. Current STS related projects include a Defense Department sponsored study of the implications of the transfer of civilian technology from the U.S. to the USSR, studies financed by the Advanced Research Projects Agency on long-range defense planning and on the relationship of the availability of energy to national security, and a look at future prospects for NASA entitled "Outlooks for Space and Aeronautics 1980-2000."

The Institute organizes lecture seminars for business and community leaders and short seminar courses for professionals from the research community. Many of these seminars focus on STS related topics.

Books, papers, and other publications which result from or are related to research projects are generally available from the Publications Office, which will furnish a list of available titles upon request.

INSTITUTE FOR THE FUTURE
2740 Sand Hill Rd.
Menlo Park, CA 94025

The Institute for the Future is an independent, non-profit research organization dedicated to the study of the long-range future. Its work is supported by business and industrial organizations, government agencies, and private foundations. Activities include research, consultation, and the organization of seminars. Research projects are concerned with the corporate environment (i.e., the future of the telephone industry or insurance risks related to future computer applications), public policy choices (social impact of computers), and societal issues (a framework for Community Development Action Planning). In 1975 the Institute initiated a Corporate Associates Program (CAP), designed specifically to assist the private sector in increasing its awareness of emerging trends and their likely long-run consequences. Future communication has been explored through the FORUM and PLANET computer-based conferencing programs.

The institute co-publishes Futures, a journal that focuses on STS related issues, and publishes reports, working papers, and bimonthly CAP Reports. A list of publications is available upon request.

THE INSTITUTE OF ECOLOGY (TIE)
PO Box A
University Hill
Logan, UT 84321

TIE is an environmental research institute funded by private foundations and government agencies. Projects include Ecological Impacts of Urbanization, Marine Ecosystem Studies, Scientists Exchange Program with Latin America, and Improving the NEPA Process. Some of these research programs result in publications. A list of publications is available upon request.

INSTITUTE OF SOCIETY, ETHICS AND THE LIFE SCIENCES

Hastings Center
623 Warburton Ave.
Hastings-on-Hudson, NY 10706

The Hastings Institute attempts to address itself to the ethical and social implications of technological and other advances in the life sciences. To this end, the institute has established research programs in death and dying, population control, genetic counseling and engineering, and behavior control. Teaching programs have been set up at a number of institutions, and post-doctoral fellowships are offered each year for study at the institute. A Student Intern Program has also been established.

The Hastings Institute publishes a variety of material, including the bimonthly Hastings Center Reports, a journal containing both scholarly and short articles, a bibliography, and institute news; an annual Bibliography of Society, Ethics and the Life Sciences; an annual report of institute activities, goals, and progress entitled Recent Activities; topic-oriented teaching packets of reprints in bioethics entitled Readings; and occasional books and monographs resulting from research projects. A complete list of publications is available upon request.

THE INSTITUTE ON MAN AND SCIENCE

Rensselaerville, NY 12147

The Institute on Man and Science has 4 main departments of research, demonstration projects, and programs:

(1) The Renewal of Human Communities, which conducts research and demonstration projects on the renewal of small communities. Five individual projects were conducted in 1974, including a study of the development of an environmental resource base for small towns. Reports of some completed projects are available.

(2) Economic and Environmental Studies, which conducts research and develops course offerings and seminars. Research includes an assessment of the social impacts of oil spills. Courses in environmental impact analysis were developed at Empire State College. This group has also published a Bibliography on Environmental Impact Analysis, which is available from the institute.

(3) Man, Science, and Technology (Public Programs), which organizes public programs in social issues in which the direction, control, and impacts of technology are critical. Programs at the institute during 1974 included "Policy for the Sciences in America," "The Individual, Nature, and Society," and "I, Thou, and the Computer," which examined the cases of abuses of computer

technology. Proceedings are available from the institute.

(4) Special contracts, which include seminars, consultations, and contract research. Projects during 1974 included a conference on Transporting Antarctic Icebergs as a Fresh Water Source (publication available) and a futures study for the National Conference for Christians and Jews.

INTER FUTURE (IF)
535 Fifth Ave.
Suite 3103
New York, NY 10017

IF is a non-profit, educational organization which annually selects undergraduates as scholars who create independent study projects which compare U.S., European, and/or Third World approaches to particular public policy issues. Students complete the projects during 3 to 7 months abroad and write reports on their projects. Subjects have included the Ghana National Family Planning Program and U.S. and U.K. Action Against Oil Pollution of the Sea. Copies of final reports are available from IF.

ARTHUR D. LITTLE, INC. (ADL)
50 Acorn Park
Cambridge, MA 02140

ADL is a private research corporation specializing in management consulting, research and development, and engineering. During 1975 projects covered a wide range of topics in the areas of energy, environment, food and agribusiness, management services, and health care. Clients included national governments, state and local governments, oil companies, and public utilities. ADL developed contingency plans for California and Connecticut in case of another energy shortage and is assisting the Kingdom of Saudi Arabia in developing and implementing a national telecommunications program. Research projects increasingly involve social and political issues such as product safety and pollution control.

An ADL subsidiary, ADL Enterprises, is engaged in the organized and systematic development of inventions, patents, and new and innovative technology. Current projects include the use of a computer program which analyzes pipe stress for use in the design of nuclear power plants.

Reports on the results of individual projects are available upon request, as is an annual list of publications.

METRICS, INC.
290 Interstate North
Atlanta, GA 30339

Metrics, Inc. was established to assist industrial and government organizations in formulating policy and making decisions involving science and technology. Metrics provides consulting services, a staff to undertake specific tasks or projects, and organizes seminars and courses. Projects can range from a technology forecast to identify future business opportunities to the design and implementation of a management information system. General courses emphasize marketing research and development to the federal government and economics and management for engineers. Special topic seminars are individually arranged. Recent projects have involved a communications study for a new town, a study of a proposed geographic and natural resources information system for South Carolina, and a remote sensing market survey.

POPE JOHN XXIII MEDICAL-MORAL RESEARCH AND EDUCATION CENTER
1438 South Grand Blvd.
St. Louis, MO 63104

This center was founded by the Catholic Hospital Association to identify medical issues that pose potential ethical problems for the Catholic Church and Catholic hospitals as they first appear. The center will promote seminars and workshops and will publish its findings in journals such as the Catholic Hospital Association's Hospital Progress. Resource materials will be made available to Catholic-sponsored health facilities. Specific task forces on issues of genetic engineering, behavior modification, various areas of reproductive and molecular biology, and organ transplantation are planned.

RAND CORPORATION
1700 Main St.
Santa Monica, CA 90406

Rand is an independent, non-profit research organization. It was founded for the purpose of studying matters that affect the public interest, such as U.S. strategic policy and urban development policy. The emphasis is on applied, rather than basic, research with an analytic, systematic, and interdisciplinary approach. Rand began as an organization that was independent of but closely associated with the military, and national security topics still are the subject of over half of Rand's projects. The Domestic Programs Division has become increasingly important, with primary focus on 7 major programs: Communications Policy, Education and Human Resources, Energy Policy, Health Sciences, Housing, Transportation, and Environment and Urban

Policy. The New York City Rand Institute is involved in research encompassing many of the problems of urban areas. The Rand Graduate Institute was founded to provide advanced graduate training leading to a doctoral degree in policy analysis. The institute's 3-year curriculum couples on-the-job training with academic training.

Rand publishes several hundred reports, studies, and books annually. Quarterly and annual indexes, with abstracts of all publications, are printed and new titles are abstracted monthly in Rand Checklist. In addition, Rand maintains bibliographies of Rand publications in a number of subject areas. These bibliographies and indexes are available upon request.

RESOURCES FOR THE FUTURE (RFF)
1755 Massachusetts Ave., NW
Washington, DC 20036
(202)462-4400

RFF is a non-profit organization for research and education established in cooperation with the Ford Foundation to advance the development, conservation, and use of natural resources and the improvement of the quality of the environment. Special attention is paid to maintaining or improving environmental quality, including the relationship of population and economic growth to the environment, particularly in urban areas. RFF both conducts research through its own staff and fellows and provides grants for complementary research. Occasional symposia, seminars, and public forums are organized for discussion of current subjects.

The staff of RFF publishes a quarterly report, Resources, and a series of monographs based on research in the areas of resource conservation and the environment. A list of monograph titles and copies of Resources are available upon request. RFF books are available from Johns Hopkins University Press. Recent titles include: Land Use and the States, Changing Resource Problems of the Fourth World, and Mineral Materials Modeling: A-State-of-the-Art Review.

SOCIETY FOR HEALTH AND HUMAN VALUES
723 Witherspoon Building
Philadelphia, PA 19107

The Society for Health and Human Values seeks to develop new understandings, concepts, and programs in the relation of human values and medicine. The society holds an annual meeting in conjunction with the Association of American Medical Colleges. Workshops and a public lecture are delivered and an annual award is presented.

The society has founded an Institute on Human Values in Medicine. The institute focuses on the structure and content of medical education. Activities include sponsorship of research projects at the intersection of medicine and the humanities and interdisciplinary education. The institute provides a number of medical schools and universities with resources to facilitate regional conferences and to introduce new programs. The institute has organized a fellows program to provide training for faculty and has formed groups of scholars to focus on specific areas of interest. Current areas include: (1) humanistic dimensions in social science in medical education; (2) the healing arts: literature and medicine; and (3) new relations between history and medicine.

The institute, in conjunction with the society, publishes materials relating to medicine and the humanities. Reports of the Institute Fellows, Proceedings of National and Regional Conferences, Abortion and Euthanasia: An Annotated Bibliography, and Human Values Teaching Programs for Health Professionals are among the available materials. In 1976 the society began publishing a quarterly Journal of Medicine and Philosophy. The society also provides miscellaneous resources to individuals and institutions upon request.

The society supports special activities and studies. Projects include the preparation of "Teaching Resources on Human Values" and the cosponsoring of a "National Symposium on Philosophy and Medicine."

STANFORD RESEARCH INSTITUTE (SRI)
Menlo Park, CA 94025

SRI is an independent, non-profit organization affiliated with Stanford University. It provides specialized research services to business, industry, government, individuals, and foundations in the physical and life sciences, engineering, industrial and development economics, management sciences, and combinations of disciplines within these fields. The main function of SRI is to engage in scientific research in the public interest, but especially for the advancement of industry. Past STS related projects have included: (1) the economic impact of air pollutants on plants in the U.S.; (2) the economic impact of energy shortages on commercial air transportation and aviation manufacture; and (3) studies of scientific research and progress in newly developing countries--ways in which basic and applied research can be used more effectively to promote socioeconomic development in Africa, Asia, and Latin America, a study which was conducted by a volunteer working group on science and newly developed countries.

SRI publishes SRI Journal, which periodically includes issues entitled SRI Journal-Feature. These issues include discussions of scientific, technical, economic, or public affairs subjects with emphasis on the problems and on the future.

SYRACUSE UNIVERSITY RESEARCH CORPORATION
Science and Technology Policy Center
Morrill Lane
Syracuse, NY 13210

The Science and Technology Policy Center conducts research under the direction of Drs. W. Henry Lambright and Albert H. Teich. Recent projects include: (1) "Environmental Research Laboratories in the Federal Government: An Inventory"; (2) "Federal Laboratories and Technology Transfer: Institutions, Linkages, Process"; (3) "Redeployment and the Dynamics of Change in Scientific and Technological Institutions"; and (4) "Adoption and Utilization of Urban Technology: A Decision Making Study."

WORLDWATCH INSTITUTE
1776 Massachusetts Ave., NW
Washington, DC 20036

The Worldwatch Institute is a private, non-profit research and analysis organization. Present and future problems in such areas as energy supply, environmental quality, and population growth are approached from an international perspective. Results of research programs are published in the form of books and papers. A list of publications is available upon request.

B. GOVERNMENT AGENCIES: A SELECTED LIST

Further Reference

Federal Council for Science and Technology. *Report on the Federal R&D Program, FY 1976*. Washington, DC: Federal Council for Science and Technology. Annual.

General Services Administration. National Archives and Records Service. Office of the Federal Register. *United States Government Manual, 1974-1975*. Washington, DC: USGPO, 1974.

U.S. Library of Congress. Science and Technology Division. National Referral Center. *Federal Government: A Directory of Information Resources in the United States*. Washington, DC: USGPO, 1974.

AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)
Department of State
Washington, DC 20523

AID carries out development assistance programs to promote the economic and social modernization of developing countries. The agency has a Development Research Program which studies the process of economic development and the factors affecting the relative success and costs of development activities. The current Catalog of Selected AID Publications lists several titles in the area of science, technology, and development, technology transfer, etc., including the following periodicals: AID Research and Development Abstracts, Applications of Modern Technologies to International Development (available from NTIS; $10/year), and Development Digest.

COUNCIL ON ENVIRONMENTAL QUALITY (CEQ)
722 Jackson Pl., NW
Washington, DC 20006

The CEQ develops and recommends policies that promote environmental quality to the president of the U.S. The council consists of 3 members appointed by the president and is located within the executive office of the president. To facilitate its function of policy recommendation, the CEQ performs a continuing analysis of changes in the environment. These changes and trends are published in an annual report, which is available from the CEQ. In addition, the council publishes a monthly report, 102 MONITOR, and special environmental studies on topics including ocean dumping and toxic substances. A list of publications is available upon request.

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION (ERDA)
Washington, DC 20545

ERDA was established in 1975 to coordinate the federal government's energy research and development activities. The major elements include research on nuclear fission and fusion; fossil, solar, and geothermal energy production; energy conservation; and nuclear weapons (formerly under the AEC). ERDA has 4 task oriented sets of energy related programs: (1) conservation of energy and energy resources; (2) investigation of the potential for more extensive fossil fuel utilization; (3) demonstration of safe, economic energy production from nuclear fission; and (4) exploitation of renewable resources (solar, geothermal, hydroelectric).

Among conservation programs, ERDA supports research on improving the efficiency of electric power transmission, developing automobile engines with smaller fuel consumption, and devising energy storage systems.

Fossil fuel utilization programs emphasize the production of clean and efficient energy from coal. Research projects include coal liquifaction and gasification. Nuclear energy research is emphasizing the development of the Liquid Metal Fast Breeder Reactor (LMFBR).

ERDA publishes a series of research reports. Information is available from the Office of Public Affairs.

ENVIRONMENTAL PROTECTION AGENCY (EPA)
401 M St., SW
Washington, DC 20460

The EPA was established to coordinate governmental action to maintain and improve environmental quality. It is charged with the development of national pollution control regulations and with the enforcement of these regulations.

The EPA conducts a research and development program designed to produce the necessary scientific information and technical tools on which to base national policy and effective control strategies in the regulation, prevention, and abatement of environmental pollution. The major thrusts are in the general areas of air pollution research, water pollution research, and the acceleration of energy related environmental research with smaller programs relating to drinking water supplies, solid wastes, pesticides, radiation, and toxic substances. These programs include studies of health impacts of pollution, studies of pollutant transport processes, development of improved measurement techniques, and the development of pollution control technology.

Specific projects are listed in the Indexed Bibliography of the Office of Research and Development Reports, which is published periodically by that office. Current programs include a number of studies at the National Environmental Research Centers and National Center for Toxicological Research. Detailed information and a list of publications is available from the Office of Public Affairs.

FEDERAL POWER COMMISSION (FPC)
825 North Capitol St., NE
Washington, DC 20426

The FPC is responsible for the regulation of interstate aspects of the electric power and natural gas industries. The commission administers a program to promote the efficient utilization of natural resources and to maintain and improve environmental quality. In the process of carrying out its duties, the FPC has been involved in a number of research projects. The National Power Survey outlines the probable development of the electric power industry through 1990. Environmental impact research is necessary for the consideration of Environmental Impact Statements (EIS). Special reports, transcripts of hearings, EIS copies, and FPC news releases are available from the Office of Public Information. Copies of these and a complete list of special reports are available upon request. Recent reports include Wind Power and Energy Conservation.

LIBRARY OF CONGRESS
10 First St., SE
Washington, DC 20540

Reference Department

The Science and Technology Division has primary responsibility for recommending acquisitions and for providing reference, bibliographic, and referral service in the broad areas of science and technology, including STS related subjects. The National Referral Center (NRC) maintains a continuously updated and subject-indexed file describing over 9000 organizations capable of meeting specific information needs. The NRC refers specific inquiries to organizations with specialized knowledge. Occasional informal lists of information resources with coverage in given subject areas (e.g., hazardous materials, population) are prepared and distributed by the NRC. Broader selections are published in the series A Directory of Information Resources in the U.S.

The Science and Technology Division also publishes an informal series of reference guides under the general title LC Science Tracer Bullet, each pointing to the literature of a given topic (e.g., science policy, the metric system, nuclear safety). A list of titles is available upon request.

Congressional Research Service (CRS)

CRS provides research, analysis, reference, and other informational services to Congress. The Science Policy Research Division handles inquiries on such subjects as science policy, aviation and space technology, biological and medical issues, behavioral sciences, earth sciences, and other science and technology issues. The Environmental Policy Division provides similar services in the environmental area.

NATIONAL ACADEMY OF SCIENCES (NAS)
NATIONAL ACADEMY OF ENGINEERING (NAE)
NATIONAL RESEARCH COUNCIL (NRC)
INSTITUTE OF MEDICINE (IOM)
2101 Constitution Ave., NW
Washington, DC 20418

The NAS is an organization of distinguished scientists and engineers dedicated to the furtherance of science and its use for the general welfare. Although not a governmental agency, the NAS is chartered by Congress to "investigate, examine, experiment, and report upon any subject of science" whenever called upon by any government agency. The NAE is an autonomous but closely coordinated organization with the responsibility for advising the federal government upon request in matters of engineering.

The NAS includes a number of committees which deal with STS related issues. These include: (1) the Committee on Science and Public Policy (COSPUP); (2) Study of the Federal Allocation Process for Funding of Scientific Research; (3) NAS Committee for Joint U.S.-USSR Academy Study of Fundamental Science Policy; and (4) the Committee on World Food, Health, and Population.

The NRC was organized by the NAS to facilitate the participation of a broader representation of scientists and technologists in carrying out its objectives and serves as the principle operating agency of the NAS and the NAE. The NRC does not maintain laboratories, but seeks to stimulate the work of individual scientists and engineers to coordinate research in broad national problems. This is accomplished through conferences, technical committees, surveys, collection and collation of data, sponsorship of publications and research organizations, and the administration of public and private funds for research projects and fellowships.

The assemblies and offices of the NRC include a number of STS related committees and subcommittees, which are listed in the annual NAS/NAE/IOM/NRC Organization Members. Additional groups include: (1) Commission on Human Resources, (2) Commission on International Relations, (3) Commission on Natural Resources, and (4) Commission on Socio-Technical Systems.

The IOM was established to identify, for study and analysis, important issues and problems that relate to health and medicine; initiate and conduct studies of national policy and planning for health care and health related education and research; respond to requests from the federal government for studies and advise on matters relating to health and medicine; and disseminate information to the public and the relevant professions. The IOM forms ad hoc committees on current areas of interest, such as the health effects of the use of saccharin.

The NAS/NAE/IOM/NRC Office of Information provides central access to information on the various units. The office publishes a monthly News Report and the NAS Annual Report. The Printing and Publishing

Office publishes a Publications Listing periodically which is available upon request. Reports, books, articles, periodicals, and bibliographies are listed. The NAS also maintains a library.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
400 Maryland Ave., SW
Washington, DC 20546

Educational Programs Division
300 Seventh St., SW
Washington, DC 20546

The Educational Programs Division of NASA has among its areas of interest: (1) scientific, technological, social, economic, and political implications of man's peaceful utilization of space, and (3) educational aspects of satellites, space exploration, and manned space flights. It makes available general interest, documentary-type films for television and classroom use; technical films of interest to engineers, scientists, and educators; and education exhibits. A list of publications is available upon request.

Technology Utilization Office

The Technology Utilization Office of NASA is responsible for promoting widespread utilization outside the aerospace community of technological innovations resulting from NASA programs. It sponsors meetings and symposia and arranges conferences at appropriate NASA field installations to discuss applications of NASA research and development results to specific problems. It publishes Tech Briefs and TU Compilations (brief announcements of recent innovations), Technology Utilization Reports, and Technology Surveys.

NATIONAL CONFERENCE OF STATE LEGISLATURES (NCSL)
Committee on Science and Technology
Iron Works Pike
Lexington, KY 40511

The NCSL formed the Committee on Science and Technology to assist state legislators in developing scientific and technical resources. The program's aims are to create an atmosphere in state legislatures condusive to implementing changes in the methods of procuring scientific and technical advice: (1) to strengthen the relationship between state legislatures and existing scientific expertise, and (2) to review and disseminate technical and scientific information that would be of interest to state legislatures. To these ends, a number of projects have been undertaken. A nationwide survey of the scientific and technical resources utilized by state legislatures has been published, and continuing research will be published in a committee periodical, Meeting the Challenge. Special exhibits and workshops on science and technology are sponsored by the committee at the National Legislature Conference Annual Meetings. Topics have included a study of the state's role in radioactive material management, mass transportation, and federal/state technology transfer. Activities of the committee are published in a monthly report on Science and Technology in the Legislatures.

NATIONAL ENDOWMENT FOR THE HUMANITIES (NEH)

Program of Science, Technology and Human Values
Office of Planning
Washington, DC 20506

The Program of Science, Technology and Human Values of the NEH funds diverse projects in the science-humanities area. Topics include the use of the humanities in scientific and technological decision procedures, historic-pragmatic views of the philosophy of science, cultural effects and influences upon technology development, relations of science and religion, social responsibility of science, literary and historical views of the social impact of technology, anthropological views fostered by science and humanities, metaphysical presuppositions of science and of technology applications, future studies, feminist and minority views of technology, social implications of information technology (including governmental/legal aspects of data banks and knowledge monopolies), law and social control of technology, biomedical issues, neurophysiology and the self, and related problems. The program funds only humanities-oriented proposals; those which also presuppose scientific expertise, or which presuppose only scientific expertise, can be funded jointly or exclusively by the NSF.

NATIONAL SCIENCE FOUNDATION (NSF)

Washington, DC 20550

Science and Technology Policy Office (STPO)

STPO was established to provide central staff support to the NSF director in his recent role as the president's science advisor and chairman of the Federal Council for Science and Technology. Major outside grant and contract activities of this office include:
(1) studies of the process of science policy formation and the methodologies which contribute to this process, and (2) specific analyses of problem areas, data gathering, and development of forecasts and analyses of the consequences of potential policy options.

STPO is currently funding a series of University Science Policy Studies on selected issues using faculty-graduate student teams. As these studies are completed, the published results will be available free from the National Technical Information Service (NTIS).

Office of Energy R&D Policy

This office is designed to assist the NSF director in the analysis, evaluation, and utilization of energy research and development. The work of the program is performed by a group of analysts and through grants and contracts with universities and other appropriate organizations.

Office of National R&D Assessment

This office is designed to provide an analytical capability to supply objective analysis and define options available for enhancing the contributions of science and technology to the nation. The emphasis of the program is on understanding processes, measuring effects, and analyzing policy implications associated with technological innovation. The program of studies is a cooperative effort involving the analytical staff at NSF and a limited number of extramural grants and contracts (about 25 per year).

Research Applied to National Needs (RANN)

At present RANN activity is divided into 4 major divisions: energy, environment, productivity, and exploratory research and problem assessment.

The energy program supports interdisciplinary research on new energy concepts and options. Specific areas of emphasis include: solar energy, geothermal energy, energy conservation and storage, energy systems, energy resources, advanced automotive propulsion, and energy and fuel transportation. All major RANN projects moving toward development and demonstrations are being transferred to the Energy Research and Development Administration.

The environment program includes sub-programs in regional environmental management, environmental aspects of trace contaminants, environmental effects of energy, earthquake engineering, fire research, weather modification, and socioeconomic response to natural hazards.

The objectives of the productivity program are to increase performance and output in the public and private sectors and to identify impacts of public policies on productivity.

The exploratory research and problem assessment program includes components in technology assessment and selected research topics (e.g., minority group problems, the consumer and the marketplace, social implications of an aging population, technology related transnational problems).

The Intergovernmental Science and Research Utilization (ISRU) activity combines the Intergovernmental Science Program and the Experimental R&D Incentives Program. These activities are designed to increase the utilization of science and technology in the public (local, state, and federal levels) and private sectors.

Division of Social Sciences

This division includes programs for funding research in history and philosophy of science, science policy, and sociology. Research on the sociology of science is supported jointly by the programs in history and philosophy of science and sociology.

Office of Science and Society

This office aims to increase public understanding of science and technology and their role in meeting national needs. The objectives include: (1) increasing the amount and quality of communication between the scientific community and the public, and (2) increasing the use of science by the public. Under a recent NSF reorganization, the Office of Public Understanding of Science, the Ethical and Human Value Implications of Science and Technology Program, and the new Science and Citizen Program have been placed under the Office of Science and Society.

Office of Public Understanding of Science

This office seeks to enhance citizen knowledge of the roles, potential, and limitations of science in our society. This is accomplished by funding films and television programs, exhibits and traveling science demonstration programs, seminars and public forums on science, regional and community programs in specific (geographically defined) problems in technology, science journalism programs, research and methodological studies in public understanding of science, and experimental and special programs in specific science or technology topics. The office gives only seed support for new programs rather than continuing support for established programs.

Ethical and Human Value Implications of Science and Technology (EHVIST)

The EHVIST Program supports research on: (1) the impact of new developments in science and technology on values of society; (2) the impact of societal values on the development of science and technology; and (3) the value issues which arise within science and technology (e.g., ethical problems encountered by scientists and engineers, etc.). The complex nature of the subject matter generally requires that funded projects have input from representatives of a broad range of disciplinary perspectives. One of the EHVIST priorities for FY 76 is the funding of in-depth case studies of specific situations (historical or contemporary) in which science/values issues have arisen. Close coordination of funding (including the possibility of joint funding) is maintained with the Program of Science, Technology, and Human Values of the National Endowment for the Humanities.

Directorate for Science Education
Division of Science Education Development and Research

Among the objectives of this division's "Alternatives in Higher Education Program" is the development of alternatives to discipline-oriented degrees and related curriculum materials.

For more information, one can consult the announcements of individual NSF offices and programs. General information can be obtained from the following NSF publications: "National Science Foundation Guide to Programs," "Grants for Scientific Research," and "National Science Foundation Grants and Awards 1975" (published annually). NSF publishes an annual bulletin, "Publications of the National Science Foundation," which lists titles and prices of all publications. The monthly "National Science Foundation Bulletin" contains announcements of current interest.

NATIONAL SEA GRANT PROGRAM

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
D7 Page Building, NOAA
Rockville, MD 20852

The National Sea Grant Program supplies two-thirds of the funding (the other one-third coming from non-federal sources) to universities, institutes, laboratories, public and private industry, and individuals for research, education, and advisory programs in marine technology. Ocean programs funded include aquaculture, advisory and public service, mineral resources, law and socioeconomics, resources recovery, ecosystems research, environmental models, biomedicinals and extracts, ocean engineering, coastal management, pollution studies, and vocational marine technical training.

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

5285 Port Royal Rd.
Springfield, VA 22151

NTIS is the central point in the U.S. for public sale of research, development, and other government-funded reports prepared by federal agencies, their contractors, or grantees. The collection includes over 80,000 unclassified reports and grows at the rate of 60,000 reports per year.

The Government Reports Announcements (GRA) are issued on the 10th and 25th of each month and include an announcement for all reports accessioned by NTIS. The GRA is indexed in the Government Reports Index (GRI), published concurrently with GRA, and Government Reports Cumulative Indexes, consisting of 2 quarterly indexes. NTIS also issues Weekly Government Abstracts, a series of bulletins announcing all reports reviewed in 13 subject categories. NTIS provides a number of information services, including abstracting services, search and inquiry services, and sales of reports. Specific information and schedules of charges are available upon request.

OFFICE OF TECHNOLOGY ASSESSMENT (ISTA)
119 D St., NE
Washington, DC 20510

OTA was established to provide assessments for congressional committees of the beneficial and adverse impacts of technologies together with analysis of alternatives. The activities of the OTA are established by the Technology Assessment Board. OTA assessments and study projects take on a variety of forms--from full-scale technology assessments to short-term reports on relatively narrow issues. Final reports are published by OTA as annual reports.

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)
2, rue André-Pascal
75775 Paris
France
Publications Center:
Suite 1207
1750 Pennsylvania Ave.
Washington, DC 20006

The OECD is an international organization concerned primarily with economic growth. Its science and technology activities are related to this central theme. Member governments include Japan and the major industrialized nations of Europe, America, and Oceania. The organization includes Committees in Energy Policy, Technical Cooperation, Environment, and Scientific and Technological Policy. The Committee in Scientific and Technological Policy includes Groups in Information Policy, Computer Utilization, Industrial Innovation, and Educational Statistics and Indicators. These committees and groups provide forums for the coordination of policies among member nations for the study of international aspects of each of these areas. In addition, some committees undertake various demonstration projects. The International Energy Agency and the Nuclear Energy Agency are affiliated with the OECD. The committees and agencies are linked through the Director of Scientific Affairs, who has overall responsibility for OECD science and technology related activities. The prime focus is on the common attack on common problems of member countries and on focusing attention on new ideas, trends, and institutional approaches. Much of this activity takes the form of publications which are available from OECD. A list of current titles is available upon request, as is the pamphlet OECD at Work for Science and Education, which includes a description of activities.

SMITHSONIAN INSTITUTION
Washington, DC 20560

The Smithsonian Institution encourages the fullest practical use of its facilities, staff specialties, and reference resources by visiting scholars and scientists. The institution particularly encourages the appointment of visiting investigators, who seek research training supplementary to their university instruction, on the pre- and post-doctoral levels. A small number of fellowships are awarded for 6 to 12 months for the support of visiting investigators. The Smithsonian is also interested in cooperative educational arrangements with colleges and universities. Inquiries and proposals should be addressed to the Office of Academic Studies.

Facilities for research in the history of science and technology are available at the National Museum of History and Technology, the Smithsonian Archives, and the National Air and Space Museum.

The Woodrow Wilson International Center for Scholars is housed in the original Smithsonian building. The emphasis of this fellowship program is placed on studies designed to increase man's understanding of significant international, governmental, and social problems, and to improve the organization of society at all levels to meet such problems. The trustees have selected 3 subjects for emphasis during the opening period of the center: (1) fundamental long-range issues of peace, world order, and U.S. international responsibilities in the post-Vietnam era; (2) the development of international law for ocean space; and (3) contemporary man and his deteriorating environment, with special attention to new forms of international cooperation needed to address certain widespread environmental problems.

The Smithsonian Science Information Exchange, Inc. (SSIE) receives synoptic records of research in progress from all available sources, including federal agencies, many private foundations, some universities, state and city governments, and industry. The total collection of research records is now over 100,000 per annum, and there has been a substantial annual growth rate. SSIE will initiate broad subject searches or special compilations of its data base in specific areas. Among the main "Research Information Packages" available is one called "Technology and Future Society," which includes most of the areas of science, technology, and public policy. For further details on services and costs write to: SSIE, Inc., Room 300, 1730 M St., NW, Washington, DC 20036.

For more information on facilities, write for Smithsonian Opportunities for Research and Study in History, Art, Science, Board of Academic Studies, Smithsonian Institution.

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)
7, place de Fontenoy
75700 Paris
France

The UNESCO series "Science Policy Studies and Documents" forms part of a program to collect, analyze, and disseminate information concerning the organization of scientific research in member states and the policies of member states in this respect. The series, which began in 1965, includes national studies, normative studies, reports of international UNESCO science and technology policy meetings, and directories in the same field. These and other UNESCO publications of interest are available in the U.S. from: UNIPUB, Box 433, Murray Hill Station, New York, NY 10016. A catalog of UNESCO publications is available upon request. (UNIPUB also publishes documents of other groups on the United Nations system: Food and Agriculture Organization, General Agreement on Tariffs and Trade, United Nations, World Meteorological Organization.)

U.S. ARMS CONTROL AND DISARMAMENT AGENCY (ACDA)
Department of State Building, Room 5443
2201 C St., NW
Washington, DC 20451

ACDA is responsible for conducting research in support of arms control policy formulation. Areas of interest include non-proliferation, national means of verification of negotiated agreements, and nuclear facility safeguards technology. Publications include an Annual Report, Documents on Disarmament (published annually), flyers, and research reports. The following reports are available from the agency: (1) "Arms Control and Disarmament Agreements," (2) "World Military Expenditures and Arms Trade 1963-1973," (3) "Arms Control--Moving Toward World Security," (4) "Nuclear Proliferation--Questions and Answers," and (5) "Environmental Warfare--Questions and Answers."

U.S. DEPARTMENT OF AGRICULTURE (USDA)
Washington, DC 20250

The USDA has several STS related research activities. Basic USDA research and development areas include projects to assure adequate supplies of food and crop and animal fibers, improve human nutrition and food safety, protect forest resources, and protect the quality of the environment. The Agriculture and Economic Research Services have projects that deal with land use, taxation, and the environment. Specific programs include the USDA Forest Pest Program and Project Stress, which is concerned with reducing energy demand and environmental impact in home construction. The department maintains a Current Research

Information Service (CRIS), which lists ongoing projects. More information can be obtained from: CRIS, Cooperative State Research Service, USDA, South Agriculture Building, Room 6818, 14th and Independence Ave., SW, Washington, DC 20250.

U.S. DEPARTMENT OF DEFENSE (DOD)
Office of the Director of Defense Research and Engineering (DDR&E)
Washington, DC 20301

DDR&E is the staff agency responsible for the formulation and execution of the defense research and development program, which includes over 20,000 ongoing projects. While many of these are classified, many unclassified technical reports are available to the public through NTIS and SSIE. In addition, the director of DDR&E issues an annual report.

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)
Office of the Assistant Secretary for Policy Development and Research (PD&R)
Washington, DC 20410

The research program of HUD is directed toward development of innovative methods and solutions to problems in the supply and maintenance of housing, management of community development processes, and management of public service delivery systems.

The Office of PD&R is authorized to fund programs of research, studies, testing, and demonstrations relating to the mission and programs of HUD. Current projects include the Urban Observatory Program and the Modular Integrated Utility System (MIUS). All research is listed in SSIE and individual projects are discussed in a research newsletter published by the PD&R office.

U.S. DEPARTMENT OF THE INTERIOR
Washington, DC 20240

The Interior Department's research and development activities derive from its responsibilities for managing the public land, water, mineral, and recreation resources of the nation in the public interest.

Research areas include earthquake prediction, energy production and consumption, environmental impact of mining, and technology assessment. The Geological Survey has initiated research in remote sensing (EROS) and land use (LUDA). The Office of Land Information and Analysis (LIA) develops, coordinates, directs, evaluates, and implements land resources and environmental impact programs of the Geological Survey. These programs are discussed in the Federal Council for Science and Technology's "Report on the Federal R&D Program, FY1976."

Research activities of the department are conducted by a number of bureaus and offices, including the Bureau of Mines, the U.S. Geological Survey, the National Park Service, the Bureau of Outdoor Recreation, and the Office of Water Research and Technology. All research projects are listed in SSIE.

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

Washington, DC 20590

The DOT sponsors a number of interdisciplinary research projects which can be divided into 3 areas. The first is concerned with meeting societal transportation needs. The National Transportation Survey collects and analyzes reports and information from the states and a number of large cities. This data is used in the formulation of new programs. The second area of concern is the evaluation of planned transportation programs. For example, the Climatic Impact Assessment Program (CIAP) has produced an assesment of the impact of climatic changes resulting from effluents introduced by stratospheric flight. The third area deals with the economic effects of transportation innovation on society. Included in this area is the San Francisco Bay Area Rapid Transit Impact Study.

Many research projects are conducted through the Office of University Research, which publishes a periodic summary of awards. DOT also publishes an annual research and development program analysis which lists current projects in various DOT-connected agencies such as the National Highway Traffic Safety Administration, the Federal Aviation Administration, and the Urban Mass Transportation Administration. In addition, DOT has published an "Evaluation of Transportation Socio-Economic Research Programs."

The various administrations and agencies within the department publish numerous monographs, bulletins, newsletters, rulings, etc. Specific requests should be addressed to a specific administration. General information and films on transportation subjects are available from the Office of Public Affairs.

U.S. HOUSE OF REPRESENTATIVES

Committee on Science and Technology
The Capitol
Washington, DC 20515

Formerly called the Committee on Science and Astronautics, the Committee on Science and Technology has been a source of useful documents in the area of science, technology, and public policy. In addition to its jurisdiction over the space program and science policy, the committee now handles virtually all authorization for federal energy and environmental research and development, excluding nuclear energy. There are presently 7 sub-committees: (1) energy research, development, and demonstration (fossil fuels); (2) energy research, development, and demonstration; (3) environment and the atmosphere; (4) space science and applications; (5) aviation and transportation research and development; (6) domestic and international planning and analysis; and (7) science, research, and technology.

C. PROFESSIONAL ORGANIZATIONS: A SELECTED LIST

Further Reference

Fisk, Margaret, ed. Encyclopedia of Associations, Vol. I, 10th ed. Detroit: Gale Research Co., 1976.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (AAAS)
1776 Massachusetts Ave., NW
Washington, DC 20036

The AAAS has several well established programs which make substantial science, technology, and public policy contributions. It publishes the journal Science, which includes a news and comment section noted for its coverage of science and society issues. Approximately 25% of the content of each of the AAAS Annual Meetings during recent years (or about 30 symposia and lectures) has been devoted to matters of science, technology, and public policy.

The association, through its board of directors and executive office, has from time to time presented testimony to Congress on relevant matters, and has issued position papers on subjects related to science policy. Two AAAS committees, Science and Public Policy and Public Understanding of Science, are actively involved in programs related to various aspects of science, technology, and public policy; public understanding of science; and scientific freedom and responsibility. The Division of Public Sector Programs provides staff for these committees, organizes regional seminars on critical issues with scientific and technical content, and arranges seminars for members of Congress and their staffs. It also initiates various mass media related projects. Several science policy related activities, most notably the development of special seminars in conjunction with the UN-sponsored World Conference on Population, Women in Development, and Habitat, are coordinated by the AAAS Office of International Programs.

A Congressional Science Fellow Program, managed by a Special Programs Manager, selects approximately 5 fellows each year and helps to coordinate similar efforts of several of the AAAS-affiliated societies including: the American Institute of Aeronautics and Astronautics, the American Physical Society, the American Psychological Association, the Federation of American Societies for Experimental Biology, the Institute of Electrical and Electronic Engineers, and the Optical Society of America. The program places outstanding post-doctoral to mid-career scientists and engineers in positions with both houses of Congress and the Office of Technology Assessment. It also provides an orientation program, a seminar series, and a general educational-fellowship structure throughout the year of the award. The purposes of the program are to make practical contributions to more effective use of scientific knowledge in government and to the training of persons for careers involving the public use of technical information and to educate the scientific community regarding the public policy process and broaden its perspective concerning the value of such science-government interaction.

In addition to its primary function of providing communication, coordination, and professional standards, the AAAS conducts several policy related studies. It has also coordinated intern programs and is studying the feasibility of developing more activities in this area.

AAAS publishes a large number of science and society related materials. The Office of Science Education publishes an annual, annotated bibliography, Science for Society, and is engaged in a survey of the users of this guide. In addition, the association publishes AAAS Science Books and Films, a quarterly science book and film review magazine, and an annual list of Audiotapes, Reprints, and Publications, which is available upon request.

AMERICAN BAR ASSOCIATION (ABA)
1155 East 60th St.
Chicago, IL 60637

The ABA has a large number of committees, divisions, sections, and other miscellaneous groups which are concerned with STS topics. Primary among these is the Section on Science and Technology. This new section includes groups in communications law, law office technology, law relating to computers, and technology assessment. The section and its sub-groups are responsible for presenting recommendations and resolutions to the ABA concerning their special areas of concern.

The Special Committee on Environmental Law is another important STS related ABA group. In 1974 this committee recommended enactment of legislation to provide for comprehensive resource planning, environmental impact criteria, and developmental objectives. The resolutions presented to the ABA included a highly specific technical section dealing with environmental impact.

Other ABA groups include the Standing Committee on Aeronautical Law, the Special Committees on Atomic Energy, Law, Energy, Environmental Control, Transportation, Aviation, and STS related committees in the Section on Anti-Trust Law.

Occasional publications are issued by ABA committees. The Standing Committee on Law and Technology, which became the Section on Science and Technology, published a study on Automated Law Research in 1973, and the Committee on Electronic Data Retrieval published Computers and the Law in 1968. The Jurimetrics Journal is published quarterly by the Standing Committee and deals with STS related issues.

AMERICAN CHEMICAL SOCIETY (ACS)
1155 Sixteenth St., NW
Washington, DC 20036

The ACS is involved in providing assistance to the government in matters of national concern related to the society's area of competence. The ACS issues policy statements on legislative, regulatory, and legal issues affecting chemical science and technology. The principal policy committee on public issues of the ACS is the Joint Committee on Chemistry and Public Affairs (CCPA). This committee directs the compilation of "Official Public Policy Statements and Communications" by the Department of Chemistry and Public Affairs (DCPA). The DCPA provides staff assistance and support to the CCPA, as well as to other committees. Among the topics covered by the policy statements are air pollution, biological warfare, energy, science and technology policy, and science information systems.

Publications of the DCPA include:

1. Published study reports
   a. Cleaning Our Environment--The Chemical Basis for Action (available from Special Issue Sales, $2.75 postpaid).
   b. Supplement to Cleaning Our Environment--The Chemical Basis for Action (available from Special Issue Sales, $1 postpaid).
   c. Chemistry in the Economy (available from Special Issues Sales, $6.50 postpaid).
2. Study reports in progress
   a. "Material Resources from the Chemical Viewpoint."
   b. "Energy and the Environment--The Chemical Viewpoint."
   c. "Chemistry in Medicine."
   d. A second and expanded edition of Cleaning Our Environment--The Chemical Basis for Action.

Policy statements on legislative, regulatory, and legal issues affecting chemical science and technology are compiled in "The American Chemical Society's Official Public Policy Statements and Communications," Volume I (October 1972-July 1974) and Addendum (August 1974-December 1974).

AMERICAN FEDERATION OF INFORMATION PROCESSING SOCIETIES (AFIPS)

210 Summit Ave.
Montvale, NJ 07653

AFIPS sponsors conferences and symposia which occasionally feature discussions and articles dealing with social issues in computing. It has a Technical Committee called "Social Implications of Information Processing Technology." AFIPS is associated with the Smithsonian Institution's computer history project through its Technical Committee "AFIPS/Smithsonian Computer History Project."

AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS (AIAA)

1290 Sixth Ave.
New York, NY 10019

STS activities of the AIAA are coordinated through the Office of the Vice-President for Public Policy. AIAA has conducted reviews of the supersonic transport and the Department of Transportation's Climatic Impact Assessment Programs. Recent publications include: "Solar Energy for Earth"; "Earth Resources: A View From Space"; "Space and the Developing Nation"; and "Aircraft Noise: Taming the Tiger."

AIAA has held meetings on the environmental impact of aerospace operations in the high atmosphere, environmental pollutants, fuel conservation, the role of technology in aircraft policy formation, and urban technology. It is involved in the Congressional Fellow Program, has a joint energy conservation panel with IEEE, and maintains a Technical Information Service, including a library on the history of flight. AIAA has committees on history, law, and sociology. The AIAA monthly magazine, Astronautics and Aeronautics, often has news and articles on public policy.

AMERICAN INSTITUTE OF PHYSICS (AIP)

Center for History of Physics
335 East 45th St.
New York, NY 10017

AIP is chartered as a membership corporation, with leading societies in the fields of physics and astronomy as members (American Physical Scoiety, Optical Society of America, Acoustical Society of America, Society of Theology, American Association of Physics Teachers, American Crystallographic Association, American Astonomical Society, American Association of Physicists in Medicine). The Manpower Division conducts research on patterns of employment and careers of physicists and astronomers.

The Center for History of Physics (Spencer R. Weart, Director) carries out research in the history of physics and astronomy, particularly in postwar America. It stresses oral history and the location and preservation of documents. The center maintains the Niels Bohr Library, with a substantial collection of books, interviews, and manuscripts available to qualified scholars. The collection is exceptionally strong in photographs and tape recordings of physicists and astronomers. The center welcomes inquiries from educators wishing to use such materials. The library also contains a National Catalog of Sources for the History of Physics and Astronomy, giving locations and contents of documentary and audiovisual collections of interest to historians and educators. Reports with partial listings are available at cost.

AIP publications include: a number of archival journals for physics research; a weekly science series aimed at science journalists; an annual pamphlet, Physics in 19--; glossaries of scientific terms; career information for physicists; "Inside AIP," a newsletter; Physics Today, a journal; directories of physicists; the Center for History of Physics Newsletter, usually issued twice a year, with information on current work and resources in the history of modern physics and astronomy; and films and some audio-visual materials.

AIP projects include a history of recent astrophysics, documentation of postwar physics, preparation of a Guide to Historical Resources for Public Understanding of Physics and Astronomy, and development of an audio cassette series: The Living History of Physics and the Human Dimension of Science.

See also, American Physical Society (below).

AMERICAN MEDICAL ASSOCIATION (AMA)
535 North Dearborn St.
Chicago, IL 60610

The AMA administration includes Offices for Medicine and Religion and for Medical Ethics. The Office for Medicine and Religion implements activities aimed at promoting communication between physicians and clergymen. The Public Affairs Division coordinates a number of legislative and public policy lobbying activities. A number of educational groups are coordinated under the Division of Medical Education. The Division of Scientific Activities gathers and evaluates technical information for dissemination to the medical profession and publishes Current Medical Information and Terminology. The Council for Environmental and Public Health assists in establishing occupational health programs in industry and provides information to interested groups.

AMERICAN NUCLEAR SOCIETY (ANS)

244 East Ogden Ave.
Hinsdale, IL 60521

While the ANS is divided into primarily technical divisions, the Environmental Sciences Division was organized for the study and dissemination of information on the relationship of nuclear energy to the environment. Division members participate in public discussions and meetings and publish articles in this area. The ANS has published a booklet entitled Nuclear Power and the Environment--Questions and Answers, which is available upon request.

The ANS Public Information Office is responsible for issuing press releases and providing information on public policy issues concerning nuclear energy such as the California initiative nuclear power plants. The Public Information Office has produced a radio series entitled Energy and the Atom and maintains a "Hotline Directory for Media" which lists local ANS members who can serve as sources for news stories on nuclear energy. Local branches of the ANS often add public information services.

ANS publishes Nuclear News and a variety of books, monographs, and conference proceedings. Some of these articles and books concern environmental, safety, and public policy issues. A complete list of publications is available upon request.

AMERICAN PHILOSOPHICAL ASSOCIATION (APA)

Special Committee on Philosophy and Medicine
John Ladd, Committee Chairman
Brown University
Department of Philosophy
Providence, RI 02912

The APA Special Committee on Philosophy and Medicine acts as a clearinghouse for information, for members of the APA and other interested persons, concerning activities in philosophy and medicine.

AMERICAN PHYSICAL SOCIETY (APS)

335 East 45th St.
New York, NY 10017

Forum on Physics and Society

The forum provides members of the APS with an opportunity for discussion of and involvement with the interrelations of physics, physicists, and society. It aims at increasing the activities of physicists in areas of broad social concern. The forum publishes a newsletter which is distributed to forum members. In addition, it organizes symposia at APS national meetings. The forum initiated and monitors the APS Congressional Fellows Program, sponsored by AAAS, which places a number of post-doctoral people in the offices of U.S. senators and representatives each year.

Membership Advisory Committees (MAC)

Each MAC group consists of a small number of scientists in a localized geographical area. The groups communicate the concerns of the membership to the APS leadership, and they involve members in local activities on the interface between science and society.

Panel on Public Affairs (POPA)

POPA is charged with analyzing and developing proposals for studies that may be submitted to the APS Council for society sponsorship.

THE AMERICAN POLITICAL SCIENCE ASSOCIATION (APSA)

1527 New Hampshire Ave., NW
Washington, DC 20036

The APSA annual meeting includes a number of panels dealing with questions of science, technology, and public policy. Topics have included the "Impact of the Scientific-Technological Revolution in Soviet Politics" and "International Monitoring and Warning Systems." In addition, the Committee on Health Politics sponsors sessions.

The APSA Division of Educational Affairs is active in a number of STS related areas. APSA was commissioned by the American Chemical Society to prepare and distribute an audio-course on science and public policy for continuing professional education. This course is to be developed by Sanford Lakoff, Chairman of the Department of Political Science at the University of California, San Diego. With NSF support, APSA is distributing a series of learning packages that are modules for computer-related instruction in American politics and public policy. These modules are called SETUPS: Supplementary Empirical Teaching Units in Political Science. One of these computer simulations is Public Policy: U.S. Environment, Energy, and Economic Problems, written by Barry Hughes at Case Western Reserve University. APSA is trying to locate faculty developing learning materials on science policy and society, and is conducting a survey on teaching politics to scientists and engineers.

AMERICAN PSYCHOLOGICAL ASSOCIATION (APA)

1200 Seventeenth St., NW
Washington, DC 20036

The APA includes a number of committees and boards which are concerned with STS related issues. Several of these committees deal with professional ethics, specifically the Committee on Scientific and Professional Ethics and Conduct and the Board of Social and Ethical Responsibilities for Psychology. In addition, there are currently 2 ad hoc groups dealing with ethics related issues: the Commission on Behavior Modification and the Task Force on Privacy and Confidentiality.

Other STS related groups include the Committee on International Relations in Psychology, the Committee on Precautions and Standards in Animal Experimentation, the Committee on Psychological Tests and Assessment, the Task Force on Environment and Behavior, and the Ad Hoc Committee on Promoting Public Interest Activities.

The APA publishes a number of journals and periodicals, many of which include occasional articles on ethics, public policy, and public affairs. Of particular importance is *Human Experimental Psychology*.

THE AMERICAN SCIENTIFIC AFFILIATION (ASA)

5 Douglas Ave.
Elgin, IL 60120

The ASA is primarily interested in the problems raised by the interface between the Biblical Christian faith and science and technology (e.g., evolutionary vs. creationist theories, etc.). It is primarily made up of scientists. The organization is planning to set up a speakers' bureau with members who are especially equipped to deal with the subject of science and Christianity.

The Journal of the American Scientific Affiliation, which is issued quarterly, and a bimonthly *Newsletter of the American Scientific Affiliation* are among the variety of materials published by the ASA. Publications also include various books and reprints of journal articles which are available from the ASA office. A list of publications can also be obtained from ASA.

AMERICAN SOCIETY FOR ENGINEERING EDUCATION (ASEE)
Suite 400
1 Dupont Circle
Washington, DC 20036

ASEE provides a forum for discussion of innovations in engineering teaching, including those in the area of technology and society. The executive committee of ASEE is seeking ways to produce better articulation between engineering talent and legislative talent. The ASEE publishes Engineering Education.

THE AMERICAN SOCIETY FOR ENVIRONMENTAL HISTORY (ASEH)
c/o John Opic
History Department
Duquesne University
Pittsburgh, PA 15219

The ASEH was founded to support the study of an historical perspective on environmental subjects and to aid in the development of a network of environmental historians. To these ends, the society promotes communication between humanists and scientists on environmental subjects. Through the publication of a journal, Environmental Review, and through annual meetings held either independently or in conjunction with other groups with similar interests, the society also collects and disseminates information about funding and research programs in environmental history.

AMERICAN SOCIETY FOR PUBLIC ADMINISTRATION (ASPA)
1225 Connecticut Ave., NW
Washington, DC 20036

The STS related activities of ASPA are concentrated within the Committee on Science and Technology in Government (Dr. Edward Wenk, Jr., Chairman). The standing committee was formed in 1972 with the purpose of providing a forum for an exchange of views and information between academics and administrators working in STS areas. Four subcommittees were formed: (1) National Issues in Science and Technology; (2) Technology Utilization for State and Local Governments; (3) Education of Public Administrators in Science and Technology; and (4) Management. The committee and subcommittees meet during the annual ASPA meeting to discuss annual programs. Current activity centers on the Science and Technology Act and the role of the Presidential Science Advisor. Working through the committees, resolutions on these subject have been written by ASPA and sent to the White House and Congress. The committee has also presented a number of panels and sponsored discussions on STS related issues at the ASPA annual meeting. Topics have included science and technology in international relations and the role of technology in democratic systems.

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
345 East 47th St.
New York, NY 10017

ASCE is well known for developing the codes and standards for the American National Standards Institute for use in construction, etc. It has Committees on Public Affairs, Legislative Involvement, National Water Policy, Transportation Policy, and a Division of Urban Planning and Development. Among the publications of ASCE is Engineering Issues, a quarterly journal designed to improve communication between engineers and the general public.

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERING (ASME)
Technology and Society Division
Jerome H. Steffens, Chairman
Catalytic Inc.
1528 Walnut St.
Philadelphia, PA 19102
Victor Paschkis, Secretary
RD #3
Pottstown, PA 19464

The interests of the Technology and Society Division are indicated by the various committees: Equal Opportunity, Engineering Education, Code of Ethics, Legislative Questions, Membership, and Outreach. The division is responsible for organizing some sessions at the ASME annual meetings, and in May 1975 cosponsored a meeting on engineering ethics with 6 other societies.

Publications of the division include proceedings of the 1968 division sessions, which have been published in the form of a pamphlet, "The Engineer's Responsibility," and the ASME Public Affairs Manual MS-64 (October 1975). The ASME also maintains an office in Washington, DC, which publishes "Washington News," a public affairs newsletter for members.

AMERICAN SOCIOLOGICAL ASSOCIATION (ASA)
1722 N St., NW
Washington, DC 20036

ASA has Ad Hoc Committees on Professional Ethics and on Information, Technology, and Privacy. Although the ASA does not have a formal section for the sociology of science, the International Sociological Association has a Research Committee on Sociology of Science.

ASSOCIATION FOR COMPUTING MACHINERY (ACM)
1133 Avenue of the Americas
New York, NY 10036

ACM is involved in a number of activities dealing with aspects of computers and society. It organizes discussions concerned with professional ethics in the computing profession. ACM sponsors a Special Interest Group on Computers and Society which publishes an informational and educational newletter, "Computers and Society." The ACM also has a Special Interest Group on Computer Science Education which is concerned to some extent with designing curricula for the non-specialist. The Committee on Computers and Public Policy has drafted "A Problem-List of Issues Concerning Computers and Public Policy" (published in CACM 17, September 1974). Another committee of ACM is preparing an annotated bibliography on the social impact of computing. One of the journals issued by ACM, Communications of the ACM (CACM), has a technical department called "Social Impacts of Computing."

BIOPHYSICAL SOCIETY
c/o Dr. Margaret O. Dayhoff
National Biomedical Research Foundation
Georgetown University Medical Center
3900 Reservoir Rd., NW
Washington, DC 20007

Ethics Committee

The Ethics Committee, chaired by Alice Burton (Department of Biology, St. Olaf College, Northfield, MN 55057), investigates general ethical components in current research and teaching practices and considers the implications of these practices for the Biophysical Society. The committee organizes symposia at joint meetings of the Biophysical Society and the American Society of Biological Chemists.

Public Science Clearinghouse Task Force

This task force, coordinated by Peter H. von Hippel (Institute of Molecular Biology, University of Oregon, Eugene, OR 97403), is developing a science advising system which will aid government agencies and citizens' groups in dealing with policy matters having scientific and technological components. Groups from other professional societies have become involved in this effort.

FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY (FASEB)
9650 Rockville Pike
Bethesda, MD 20014

FASEB was formed to bring together investigators in the biological and medical sciences represented by the 6 member professional organizations and to disseminate information on the results of biological research through publications and meetings. The Life Sciences Research Office of FASEB conducts studies for federal agencies and reports are written to aid in government decision making. Such reports provide scientific and technological assessment of the subject, indicate new research opportunities, and include specific recommendations for future research.

FASEB publishes a monthly public affairs newsletter and monthly proceedings which include a public affairs section. The Public Affairs Office and Committee are involved in the preparation and distribution of "FASEB Feature Service," a monthly compilation of lay language reports of research in the life sciences.

FASEB sponsors a Congressional Science Fellow. The first fellow has served as a staff member of the Senate Subcommittee on Health.

HISTORY OF SCIENCE SOCIETY (HSS)
428 East Preston St.
Baltimore, MD 21202

HSS publishes a quarterly journal, Isis, "an international review devoted to the history of science and its cultural influences." Periodically, the journal includes "A Guide to Graduate Study and Research in the History of Science, Technology and Medicine." The last one appeared in 1974. HSS also publishes the History of Science Newsletter. The Committee on Undergraduate Education, chaired by H.I. Sharlin at Iowa State University, is considering the development and expansion of the history of science and technology in the undergraduate curriculum. The committee has published a Report on Undergraduate Education in the History of Science, which is available from Professor Sharlin, Department of History, 603 Ross Hall, Iowa State University, Ames, IA 50011.

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE)
345 East 47th St.
New York, NY 10017

The IEEE organizes topical conferences which are often STS related. Examples during 1975 included Electrical Safety in Hazardous Environments and Cybernetics and Society. Conference proceedings are available from the IEEE.

The IEEE Committee on Social Implications of Technology (C-SIT) includes working groups in ethics, energy and environment, education, systems engineering and public technology, national security, and communications and data banks. Many of these groups prepare position papers on public policy issues such as nuclear power plants or computers and privacy. The ethics group is responsible for selecting the recipient of the IEEE Award for Outstanding Service in the Public Interest.

C-SIT publishes an occasional newsletter and Workshop Records on topics such as "Engineering in the Service of Society: New Educational Programs." The IEEE Press has published a number of relevant books including Technology and Social Institutions, edited by Kan Chen, and Cleaning the Air: The Impact of the Clean Air Act on Technology, by John C. Redmond. In addition, individual issues of IEEE Proceedings and Transactions are occasionally devoted to special topics such as environmental pollution instrumentation or biological effects of microwaves. The IEEE Power Engineering Society has published a series of energy related pamphlets.

IEEE also has an Ad Hoc Committee on Computer Technology Assessment.

INSTITUTE OF FOOD TECHNOLOGISTS (IFT)

221 North La Salle St.
Chicago, IL 60601

The IFT includes an Expert Panel on Food Safety and Nutrition, which, in cooperation with the Committee on Public Information, is responsible for studying and disseminating information on aspects of food safety and nutrition. The panel prepares research reports for publication in the Journal of Food Science or Food Technology, and popularized versions are published in Food Technology and issued as press releases. A Communications Committee was formed to make local IFT representatives available to the media for consultations. The objective of the program is to promote the dissemination of "factual" and "balanced" information on food science and technology to the public.

Completed report subjects include Botulism, Carageenan, Mercury in Food, Organic Foods, and Shelf Life of Foods. Reprints are available upon request.

INSTITUTE ON RELIGION IN AN AGE OF SCIENCE (IRAS)

5711 South Woodlawn Ave.
Chicago, IL 60637

IRAS is a small membership society which holds meetings and conferences to open channels of communication for members of the scientific and religious communities. The central meeting is the annual Star Island Interfaith Conference on the Coming Great Church, at which 200 scientists and theologians gather to explore the relationships of science to religion. Themes include such topics as "Ethics and Ecology" and "Computers and Religion." A number of papers presented at these meetings have been published in various journals and books. A complete list of publications is available from IRAS upon request.

The IRAS Committee on Science and Human Values has been active in organizing symposia and publishing papers in its area of interest. The first symposium was held in conjunction with the AAAS annual meeting in 1970, and the proceedings were published in the quarterly journal of religion and science, Zygon, of which IRAS is a co-publisher. The Center for Advanced Study in Religion and Science (CASIRAS), affiliated with the Boston Theological Institute and the Chicago Cluster of Theological Schools, began with the assistance of the IRAS Curriculum Enrichment Program. Other more modest programs have been organized by the group and by individual IRAS members.

THE INTERNATIONAL COUNCIL FOR SCIENCE POLICY STUDIES

Dr. I. Spiegel-Rösing, Secretary/Treasurer
Abteilung fur Wissenschaftsforschung
Universitat Ulm
D-79 Ulm, Postfach 4066
Federal Republic of Germany

The International Council for Science Policy Studies is an autonomous section within the Division of History of Science of the International Union for the History and Philosophy of Science. Its goals are: (1) to establish close working relationships among specialists involved in aspects of the study of science, technology, and society; (2) to promote international cooperation for study in this field; and (3) to stimulate research and documentation in science policy studies by and for scholars of different countries. To these ends, the council has sponsored conferences and workshops, summer schools on science policy for developing countries, research projects, and projects to promote the development of the field. Conference themes have included "The Relationship Between Basic and Applied Science" and "Can Science be Re-Directed." The council is currently preparing Science Policy Studies in Perspective (edited by I. Spiegel-Rösing and D. de Solla Price), which will critically review the specialized research areas in science policy studies.

INTERNATIONAL FEDERATION FOR INFORMATION PROCESSING (IFP)

3, rue du Marche
1204 Geneva
Switzerland

Conferences sponsored or cosponsored by IFIP have dealt with the social impact of computing. IFIP has established a Technical Committee, TC-9, Relationship Between Computer and Society, to explore the computer's impact on society.

INTERNATIONAL SOCIETY FOR TECHNOLOGY ASSESSMENT (ISTA)

PO Box 4926
Cleveland Park Station
Washington, DC 20008

ISTA is a professional organization which organizes meetings and conferences and publishes materials concerned with the assessment of the social impact of technology. Publications include a quarterly journal, Technology Assessment; a newsletter, TA Update; and a series of reprints of technology assessment related source materials intended for use in universities as curriculum materials. Subjects include technology assessment in Europe and the process of technology assessment in the federal government. A list of reprints is available on request.

PHILOSOPHY OF SCIENCE ASSOCIATION (PSA)

c/o Professor Peter Asquith
Michigan State University
18 Morrill Hall
Philosophy Department
East Lansing, MI 48824

The PSA is an international society dedicated to the furthering of studies and free discussion from diverse standpoints in the field of philosophy of science. To promote these objectives, the PSA: holds biennial conferences and arranges for the publication of the proceedings of these conferences; publishes the quarterly journal, Philosophy of Science; and publishes a Newsletter. Past conferences have included symposia on topics such as "Recent Developments in National Decision Theory" and the "Philosophy of Biology: Sociobiology."

THE SOCIETY FOR THE HISTORY OF TECHNOLOGY

Dr. Carroll W. Pursell, Jr., Secretary
Lehigh University
Department of History
Bethlehem, PA 18015

The objectives of the Society for the History of Technology are to promote the study of technological change, increase public understanding of the role of technology in the development of civilization, and encourage international cooperation and communications among scholars and technologists. Emphasis is placed on the relationship of technology to science, politics, social change, the arts and humanities, and economics.

Annual meetings are conducted jointly with the American Historical Association. The society publishes Technology and Culture quarterly and publishes a monograph series. Titles include the "Development of Technical Education in France 1500-1850" and a "Bibliography of the History of Technology." Publications are available from: Technology and Culture, The University of Chicago Press, 11030 Longley Ave., Chicago, IL 60628.

SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS (SIAM)

SIAM Institute for Mathematics and Society (SIMS)
33 South 17th St.
Philadelphia, PA 19103

SIMS sponsors a Transplant Program for faculty from colleges and universities. Faculty chosen for the program spend 2 years on one or more societal problems, make significant contributions to their solution, and, if possible, become involved in implementing the solutions. The 1975 program was devoted to energy problems. Participants in the program were placed at the Electric Power Research Institute, Palo Alto, CA; the Energy Laboratory, MIT; the Environmental Quality Laboratory, California Institute of Technology; and the National Center for Energy Management and Power, University of Pennsylvania. In the summer of 1975, SIMS sponsored the SIMS Research Application Conference on energy, including policy, regulation, and decision making.

THE SOCIETY FOR SOCIAL STUDIES OF SCIENCE (SSSS)

c/o Robert McGinnis, Secretary-Treasurer of SSSS
392 Uris Hall
Cornell University
Ithaca, NY 14853

SSSS seeks to promote research, learning, and understanding in the systematic social analysis of science. It is an independent organization which cooperates with other organizations having similar interests. The membership includes scholars interested in the social and policy aspects of science. SSSS publishes SSSS--the Newsletter of the Society for Social Studies of Science.

WORLD FUTURE SOCIETY (WFS)
4916 St. Elmo Ave.
Washington, DC 20014

WFS is an association for the study of alternative futures, and membership is open to everyone. Regular services include the publication of books (e.g., The Educational Significance of the Future), specialized documents (e.g., "Films on the Future"), and The Futurist, a bimonthly journal of trends, forecasts, and ideas about the future. WFS has a rapidly growing inventory of audio-tapes, which are available to members on a low cost basis. WFS holds "General Assemblies," which are large, multidisciplinary convocations of the society. Specialized conferences are also held periodically.

Special sections exist or are forming in the following areas: biology/medicine; cities; communications; education; energy and resources conservation; food and population; government; human values; international affairs; new technology; transportation; work and careers. The society's newly-created Professional Activities Division conducts a program to create new knowledge and to encourage professionalism in the field of futures research.

D. PUBLIC INTEREST ORGANIZATIONS: A SELECTED LIST

Further Reference

Clark, C.C., and Marcus, M.K., eds. Information Resources for Public Interest, 6th draft ed., May 1975. Commission for the Advancement of Public Interest Organizations, 1875 Connecticut Ave., NW, Suite 1013, Washington, DC 20009.

THE ARMS CONTROL ASSOCIATION (ACA)

11 Dupont Circle, NW
Washington, DC 20036

The ACA holds monthly private seminars for Washington journalists for background discussions on issues of current interest in the field of arms control and disarmament. An annual conference is held in Washington each November or December. Joint meetings with other organizations are also held occasionally. The association does not sponsor research, but it has cooperated with the Carnegie Endowment for International Peace in identifying promising avenues for research.

The association includes a Speakers Bureau which provides arms control experts upon request for speaking engagements, panel discussions, and television and radio interviews. The ACA also publishes arms control related literature including: (1) NPT: Paradoxes and Problems, edited by Anne W. Marks; (2) a report of a meeting at Divonne, France, September 9-11, 1974, sponsored by the Arms Control Association and the Carnegie Endowment for International Peace, which examined prospects and problems for the Non-Proliferation Treaty Review Conference in 1975; (3) Arms Control Today, a monthly newsletter; and (4) Arms Control, Disarmament, and National Security: A Quarterly Annotated Bibliography.

CENTER FOR SCIENCE IN THE PUBLIC INTEREST (CSPI)

1779 Church St., NW
Washington, DC 20036

CSPI is a public interest group involved in public information and legal action in areas concerned with science and technology. To these ends, CSPI organizes meetings (i.e., the Citizens Energy Conference), initiates lawsuits (against EPA), and participates in congressional and agency hearings. CSPI also publishes a newsletter which includes discussions of current issues.

Specific projects include the "Lifestyle Index," which is a study of energy consumption, and a new environmental ethics study. The "Lifestyle Index" resulted in the publication of The Contrasumers, A Citizen's Guide to Resource Conservation by Albert J. Fritsch, a co-director of the center. Contrasumers may be obtained from the CSPI Reports Department. A CSPI Energy Series study entitled Nuclear Energy: The Morality of Our National Policy, by William H. Millerd, is also available. Other CSPI studies and publications cover a variety of topics including nutrition and highway safety. A list of publications is available upon request.

COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING (CSRE)
475 Riverside Dr.
New York, NY 10027

CSRE was formed by engineers seeking to apply their engineering skills to the solution of social problems. The committee is primarily concerned with what it sees as the need to de-emphasize military technology and use the engineering resources currently employed for weapons development in areas such as environmental quality, transportation facilities, and health care. In 1971 CSRE held a New Engineering Conference to discuss these issues.

CSRE publishes a quarterly journal, SPARK, and maintains a list of literature which deals with aspects of social responsibility in engineering. A copy of this list is available upon request.

THE ENVIRONMENTAL DEFENSE FUND (EDF)
162 Old Town Rd.
East Setauket, NY 11733

The EDF is primarily concerned with legal action and public education on issues which affect environmental quality. A litigation staff is responsible for initiating and participating in lawsuits and is assisted by the Scientists Advisory Committee and the Legal Advisory Committee. The major areas of activity are water resources management, energy policy, pest control, and environmental health. Current activities are discussed in a monthly newsletter and an annual report.

FEDERATION OF AMERICAN SCIENTISTS (FAS)
307 Massachusetts Ave., NE
Washington, DC 20002

FAS is a public interest lobby of scientists. It was organized for the specific purpose of legislative lobbying to help ensure civilian control of atomic energy and has expanded its region of activity to cover the general area of science and society. Current issues of concern include chemical and biological warfare, arms control, energy, national health insurance, and Soviet and Chinese science.

In addition to active legislative lobbying, the FAS makes its position known through press releases, press conferences, and special research reports. FAS was influential in the fight against ABM deployment, sent the first delegation of American scientists to China since the 1950's, and has been actively lobbying on behalf of Soviet scientists who wish to emigrate. The FAS publishes a monthly Public Interest Report, usually concerned with a single topic in the area of science and society.

NATURAL RESOURCES DEFENSE COUNCIL, INC. (NRDC)
15 West 44th St.
New York, NY 10036

The NRDC initiates legal actions, provides attorneys, and submits briefs in cases concerning the environment. Current activities are publicized in the quarterly NRDC progress report and the NRDC newsletter. The NRDC also publishes position papers and research reports on environmental issues. Major areas of concern include the development of breeder reactors and problems of land use in New York State. A list of publications, reports, briefs, and decisions is available upon request.

SCIENCE FOR THE PEOPLE/SCIENTISTS AND ENGINEERS FOR SOCIAL AND POLITICAL ACTION (SESPA)
9 Walden St.
Jamaica Plain, MA 03130

SESPA is a loosely structured organization of national scope concerned with the "misdirection of science and technology." Activities include research, public discussion, publication, and political action generally organized by the local chapters and project groups. Issue areas are concerned with organizing scientific and technical institutions, providing technical assistance to labor and other groups, and opposing military and social control research. Project groups include Science for Vietnam, which has prepared packages of literature on the treatment of TB and malaria and on weather modification warfare, and a Science Teaching Group, which is developing materials for teaching science in a socio-political context.

The organization publishes the bimonthly magazine Science for the People and a number of pamphlets prepared by individual project groups. Examples include Science Against the People, An Indictment Against the Army Mathematics Research Center and a Science and Society Series of topical reports.

SCIENTISTS INSTITUTE FOR PUBLIC INFORMATION (SIPI)
49 East 53rd St.
New York, NY 10022

SIPI focuses on the interface between science and social policy in a number of ways by serving as a clearinghouse for science information. It develops and disseminates information in non-technical language for use in public policy decision making. In the course of working for the disclosure of scientific data, SIPI participated in a lawsuit filed against the AEC in a successful attempt to require the filing of an environmental impact statement on the breeder reactor program.

Most SIPI members are scientists, but non-scientists may also join. In addition, a group of fellows is elected to the institute for 2-year terms, based on their work in disseminating science information. The programs of local committees and national task forces include studies and projects on energy production and utilization, occupational health and safety, environmental consequences of war, and the applications of technology in law enforcement. These programs consist of workshops, conferences, publications, and maintenance of libraries. A national library on the interaction of science and society is maintained at SIPI headquarters in New York. SIPI's Margaret Mead Internship enables undergraduates to work with national task forces.

SIPI publications include Environment magazine; Job Health News Service; non-technical workbooks on Air Pollution, Environmental Cost of Electric Power, Environmental Effects of Weapons Technology, Hunger, and Pesticides. In-depth examinations of problems are presented in the institute's Environmental Issues Series. A list of publications is available upon request. SIPI members receive Sipiscope, a monthly newsletter focusing on the institute's activities.

SOCIETY FOR SOCIAL RESPONSIBILITY IN SCIENCE (SSRS)

221 Rock Hill Rd.
Bala-Cynwyd, PA 19004

SSRS was formed by a group of scientists and engineers "deeply concerned by the increasing use of science for destructive ends." Its purpose is to involve individual scientists and engineers in the recognition of the consequences of their work for society. To this end, SSRS sponsors discussion groups, primarily at universities, on ethical problems and issues in science and engineering. SSRS also publishes a newsletter and pamphlets on issues of current importance.

UNION OF CONCERNED SCIENTISTS (UCS)

1208 Massachusetts Ave.
Cambridge, MA 02138

UCS was formed as an informal faculty group at MIT to work on questions relating to the impact of advanced technology on society. It now has assembled a cadre of volunteers plus a full-time staff of researchers, writers, and lawyers. In 1971 UCS received modest foundation support to conduct an independent research and public education project on rational energy policy. In addition to its research work, UCS serves as an advocate organization trying to represent an independent view of issues before the courts and administrative agencies.

UCS has published 6 volumes of technical studies on nuclear power and publications dealing with air and water pollution, the strategic arms race, liquefied natural gas (LNG) transportation and storage hazards, and utility rates structures. A list of these publications is available upon request.

E. FOUNDATIONS: A SELECTED LIST

Further Reference

Foundation News. Bimonthly. Council on Foundations, Inc., 888 Seventh Ave., New York, NY 10019.

Lewis, Marianna O., ed. The Foundation Directory. Edition 5. New York: The Foundation Center, 1975.

AGRICULTURAL DEVELOPMENT COUNCIL, INC.
630 Fifth Ave.
New York, NY 10020

The Agricultural Development Council supports teaching and research related to the economic and human problems of agricultural development, primarily in Asia. Teaching grants are related to agricultural and land policy for developing countries, administration of agricultural programs, and production incentives for farmers. Research grants cover the areas of rural marketing and trade, water resource development, allocation of resources to accelerate technological change, and interrelationships of rural employment, income distribution, and ability of existing institutions to deliver essential services. Two new programs, the Interregional Program in Asia (located in Singapore) and the Research and Training Network Program (in New York), are designed to strengthen professional communication and professional development in the rural social sciences and to enhance professional capacity to work on problems of agricultural and rural development.

THE ARCA FOUNDATION
100 East 85th St.
New York, NY 10028
(212)861-8300

The present focus of the Arca Foundation's efforts is population problems and nonformal or nontraditional educational programs that relate to population and nutrition issues. This can be interpreted to include various types of social action proposals, including community-based population planning, alternative child rearing, parole employment/education programs, experimental foods production, contraceptive information, and the application of communications technology to all of these efforts. Particular emphasis has been given to video and other mass media educational formats.

THE COMMONWEALTH FUND
Harkness House
1 East 75th St.
New York, NY 10021
(212)535-0400

The Commonwealth Fund makes grants to organizations (not individuals) concerned with medical education, health care delivery, education in the allied health professions, and major social problems that have a definite medical component. With few exceptions, awards for innovative programs in these areas are made to university medical centers. Recently funded areas include hospital-based public health education and medical aspects of problems regarding violent social behavior, and, more generally, programs for bringing health care to the communities which surround university-based health centers.

THE CAMILLE AND HENRY DREYFUS FOUNDATION, INC.
445 Park Ave.
New York, NY 10022

The Dreyfus Teacher-Scholar Grants are awarded to junior faculty to advance chemistry, biochemistry, and chemical engineering as a means of improving human relations and understanding throughout the world. Although the grants are intended to aid teachers with promising careers rather than to sponsor research alone, they offer unstructured support to those who display the most potential for initiating concrete projects in those fields most directly related to technological and social implementation.

THE FORD FOUNDATION
320 East 43rd St.
New York, NY 10017

Four divisions of the Ford Foundation fund research and programs in the area of societal use of technology. The National Affairs Division funds numerous community development corporations that function mainly as minority self-help programs in depressed urban and rural areas. Assistance to public interest and legal aid firms, combined with efforts in the fields of criminal justice, cultural roots, and consequences of drug abuse, job satisfaction and safety, and third party techniques for conflict resolution, strengthens the community-based orientation and resolution of the social inequities caused by the wealth which creates and sustains technological change only for the benefit of those who can afford it. The International Division performs a similar function in developing countries. Programs in family planning, nutrition, studies of the cultural and psychological factors that affect fertility and health, agricultural economics, rural sociology (including educational structures and language problems created by multilingual populations and foreign language technology), and international aspects of indigent economic and environmental problems all receive high priority. Fellowships and exchange programs in technology management strive to encourage multinational approaches to common problems. The newly-created Office of Resources and the Environment seeks to integrate the skills of scientists, lawyers, and planners in order to create public information programs which in turn can initiate citizen action on environmental problems. The office's Energy Policy Project and Resources for the Future are designed mainly for the professional training and research which is requisite for informed citizen action. Finally, the Office of Public Broadcasting funds various individual and corporate attempts to upgrade and de-commercialize the visual/audio mass media. Recent attention has also been given to communications media; guided by the maxim of "news as a consumer item," the office has broached the question of news and the law, in the conviction that communication must be opened between the journalist and the jurist.

CHARLES F. KETTERING FOUNDATION
Suite 300
5335 Far Hills Ave.
Dayton, OH 45429

The Kettering Foundation's Science and Technology Program sponsors both a research laboratory, which is geared toward efficient production of artificial fertilizer and development of non-leguminous plant strains which can receive such fertilizer, and a granting mission, which funds projects in the interrelationships between food production and environment, including climatic constraints, environmental impacts, energy use, and land use. The mission's goal is to better feed all people without ruining the environment.

ELI LILLY AND COMPANY FOUNDATION
307 East McCarty St.
Indianapolis, IN 46206

Although the Lilly and Company Foundation concentrates on local grants for health, civic, and cultural activities and for medical and pharmaceutical education, it funds large-scale national programs such as the creation of a center for the study of government regulation.

THE JOHN AND MARY R. MARKLE FOUNDATION
50 Rockefeller Plaza, Suite 940
New York, NY 10020

The Markle Foundation's current major interest is the educational use of mass media and communications technology, which includes research, educational programs, and special projects to improve the understanding and educational service of the media.

MILBANK MEMORIAL FUND
40 Wall St.
New York, NY 10005
(212)944-4989

The Milbank Memorial Fund concentrates on consumer-oriented proposals for health care delivery and proposals for changes in the financing of health services, in the organization and provision of services, and in the education and utilization of health manpower. This has included support in the areas of the legal, socioeconomic, and educational aspects of health care.

RESEARCH CORPORATION
405 Lexington Ave.
New York, NY 10017

The Research Corporation has a dual mission: to support research in the natural sciences and to help utilize the results of scientific inquiry. This is done under the aegis of 4 grant programs: (1) Cottrell College Science Grants provide funds for basic scientific research; (2) Cottrell Research Grants provide support for basic and engineering-oriented research at the graduate level; (3) Brown-Hazen Grants cover research and implementation of projects in biochemistry, immunology and microbiology, and (medical) mycology; (4) Williams-Waterman Grants assist basic and practical programs to combat nutritional diseases in the western hemisphere. In addition to these programs, the corporation has a free patient assistance program for the implementation of technical innovation and considers for support unusual, challenging concepts in its fields of interest.

ROCKEFELLER BROTHERS FUND
30 Rockefeller Plaza
New York, NY 10020

The Rockefeller Brothers Fund provides grants in those fields which it is believed provide effective points of entry toward solutions of overall societal problems. This presently includes environmental problems (including population planning and the development and use of resources), equal opportunity, quality of life (religion, human values, and culture), and education. Considering itself basically as a "concerned citizen" of New York City, many grants are directed to programs of general but local import, in New York or in urban areas generally. There are 4 major criteria for grant consideration: (1) an agency's proposal must provide "basic" services; (2) the agency itself must be a key to the provision of such services; (3) the internal structure of the agency must display soundness and efficiency; and (4) the external support for the agency must be wide enough that the fund need not assume major funding responsibility. These criteria are not rigid; although partial support of established city-wide or national agencies is the custom, the fund provides full support to projects and agencies which have a specific focus, in order to eliminate fragmentation and duplication of an agency's general objectives. In areas such as housing and day care, therefore, pilot projects which show promise of generalized success can qualify for substantial initial support, with the possibility of continued but reduced support once a program establishes firm local roots.

ROCKEFELLER FAMILY FUND
49 West 49th St.
New York, NY 10020

The Rockefeller Family Fund aids non-profit organizations in 5 areas: conservation, equal opportunity for women, institutional responsiveness, education, and the arts. The conservation program basically supports public interest legal organizations whose activities embrace litigation, formal appearances before government agencies making regulations affecting the environment, counseling citizens' groups concerned with environmental matters, or assisting in regional conservation matters crossing state lines. The equal opportunity program aids women in careers and professions and those attempting to break down employment barriers based on sex; legal analysis of issues of sex discrimination; and attempts to develop, through the education process and the media, more positive images of the roles and responsibilities of women. The program on institutional responsiveness seeks to fund professional groups wanting to organize for public interest work, in order to insure that techniques and institutions are developed which allow individuals and groups to exert a significant influence in decisions affecting their well-being. The arts program is focused on "public aesthetics," the attempt to use public spaces (such as streets, plazas, and school playgrounds) for the public interest. The education program is oriented toward reforming the role of secondary schools in the community. By involving outside education consultants and parents in the problems of sustaining academic interest in the face of large classes and financial difficulties, the fund seeks to aid programs which help to locate the secondary school more effectively in community and family life.

THE ROCKEFELLER FOUNDATION
111 West 50th St.
New York, NY 10020

The Rockefeller Foundation concentrates support on 7 broad areas: hunger, population, the strengthening of emerging centers of learning in the developing countries, the resolution of conflict in international relations, equal opportunity, cultural development, and environment. Although grants are awarded to institutions, there is a new program of humanities grants which are designed to aid individual humanists who address general social or technological problems in the above areas, in order to illuminate and assess the values of contemporary society.

RUSSELL SAGE FOUNDATION
230 Park Ave.
New York, NY 10017

The Russell Sage Foundation has given primary attention to the application of social science research to social policy formation in the following areas: law, education and human resources, biology, social change, and the mass media. Through a coordination of efforts by resident staff, visiting scholars, and institutionally-sponsored grantees, plus a General and a Law and Social Science Residency Program, the foundation seeks to broaden all approaches to social problem solving. By following funded programs into at least the early stages of practical utilization, and by reserving the right to publish any socially useful results, the foundation aims at broad dissemination of new approaches to the above areas of interest.

ALFRED P. SLOAN FOUNDATION
630 Fifth Ave.
Rockefeller Center
New York, NY 10020

The Sloan Foundation funds both special programs, such as minority education in engineering, medicine, and management, and more general programs in economics and management, science and technology, and in the related problems of society. Major goals are the education of engineers who are aware of the economic, social, and political implications of technology, the advancement of fundamental science, fellowship support for training journalists in economics, improvement of the relation between transportation and other problems of economic-racial groups, mathematical models for problem-solving in technology, and support for urban studies and human ecology.

III. RESOURCES

A. CURRICULUM MATERIALS AND PUBLICATIONS AVAILABLE FROM ACADEMIC INSTITUTIONS

ARIZONA

0030 ARIZONA STATE UNIVERSITY
Tempe, AZ 85281

c02 ASE 402: Technology, Society & Human Values. — syl. & bib. From: HW Welch

c03 ASE 403: Engineering Technology & Public Policy. — syl. & bib. From: HW Welch

CALIFORNIA

0070 CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, CA 91125

1. Reports of the Environmental Quality Laboratory.
2. Publications of the Staff: monthly report of everything published by faculty and staff of the Institute.

0130 CLAREMONT GRADUATE SCHOOL
Claremont, CA 91711

c04 Psych: Psychology of Science. — bib. From: MW Lipsey

0140 HARVEY MUDD COLLEGE OF THE CLAREMONT COLLEGES
Claremont, CA 91711

c01 Hist 151: Technology in Civilization III. — bib. & notes From: JB Rae

c02 Hist 152: Technology in Civilization IV. — bib. & notes From: JB Rae

c03 Hum 131: Technology, Literature, & Art. — bib. & notes From: WH Davenport

0190 LOYOLA UNIVERSITY SCHOOL OF LAW
Los Angeles, CA 90015

c01 Law 354: Genetic Engineering & the Law. — bib. & outl. From: RG Decker

0250 SAN FRANCISCO STATE UNIVERSITY
San Francisco, CA 94132

A. c02 Engl 324: Einstein & Modern Literature.
bib. & syl.
From: AJ Friedman
UC-Berkeley
Lawrence Hall of Sci.

c03 Engl 630: Darwin & the History of Ideas.
bib. & syl.
From: MS Gregory

c04 Engl/Phil 671: Newton: Physics, Philosophy & Literature.
bib. & syl.
From: E Nierenberg
Engl Dept

B.
1. Michael S. Gregory, "Science and Humanities: a Program for Convergence," public lecture at UC Lawrence Hall of Science, May 1974. $2.50.
2. Alan J. Friedman, "Einstein and Modern Literature," public lecture given on several occasions.
3. Alan J. Friedman, "A Science-Humanities Course Series," paper delivered at APS/AAPT Joint Meeting, Anaheim, Spring 1975.
4. Nathan Feifer, "An Interdisciplinary Approach to Physics," paper delivered at APS/AAPT Joint Meeting, Anaheim, Spring 1975.

0260 SAN JOSE STATE UNIVERSITY
San Jose, CA 95192

A. c04/ c17 CS 204/297B: Future Studies.
Extensive collection of instructional materials, e.g., workbooks, identified with the ADVENT Futures Education Program.
From: DC Miller
DCM Associates
908 Fox Plaza
San Francisco, CA 94102

B.
1. Cybernetic Systems Monograph #1: The Humanization of Technical Man, by Gerd Wallenstein, Jan 1972, 23pp. $1.
2. Cybernetic Systems Monograph #2: Humanistic Measures of Design, by CJ Clark, July 1974, 30pp. $1.
3. Cybernetic Systems Monograph #3: An Experiment in Conducting a Computer Based International Conference, a class project, 13pp. $1.
4. Cybernetic Systems Monograph #4: Technology Transfer: An Overview, by Duncan McPherson, 158pp. $4.

Monographs available from Cybernetic Systems Program.

0270 STANFORD UNIVERSITY
Stanford, CA 94305

1. Program in Information Technology & Telecommunications: has list of reports available which can be obtained from the program.

0280 UNIVERSITY OF CALIFORNIA, BERKELEY
Berkeley, CA 94720

1. "Explaining Energy": 100pp. of notes & 300 entry bibliography on energy. From: L Schipper, Energy & Resources Group.
2. Catalogue of Energy Related Slides (no illustrations). From: L Schipper, Energy & Resources Group.
3. "The Two Non-Cultures--Unscientific Science & Inhumane Humanities": article. From: M Scriven, Phil. $2.
4. "The Exact Place of Value Judgments in Science": article. From: M Scriven, Phil. $1.25.

0320 UNIVERSITY OF CALIFORNIA, LOS ANGELES
Los Angeles, CA 90024

The following reports are available from Environmental Science & Engineering Program:

1. Future Alternatives for the Santa Monica Pier, 1973.
2. Air Pollution Control in California from 1970 to 1974: Some Comments on the Implementation Planning Process, 1974.
3. Air Pollution & City Planning: Case Study of a Los Angeles District Plan, research investigation, 1972.
4. Air Pollution & City Planning: Case Study of a Los Angeles District Plan, findings, recommendations, explanations, 1972.
5. Environmental, Technical, Legal & Safety Aspects Related to Floating Power Plants off the Coast of California, 1973.
6. Facing the Future: Five Alternatives for Mammoth Lakes, 1972.
7. Recreation Demand in the Santa Monica Mountains in 1990. A substudy from Population & Energy in Los Angeles: The Impact of Different Rates of Growth on Transportation, Air Quality, Housing, & Open Space, 1975. Report 1 of 5 volume report.
8. Impact of the Energy Crisis & Estimates of Future Air Quality. A substudy from Population & Energy in Los Angeles: The Impact of Different Rates of Growth on Transportation, Air Quality, Housing & Open Space, 1975. Report 1 of 5 volume report.

0340 UNIVERSITY OF CALIFORNIA, LOS ANGELES, SCHOOL OF MEDICINE
Los Angeles, CA 90024

The Medicine & Society Forum has available one-hour videotape recordings of highly structured panel discussions of the following topics:

1. Spina Bifida with Meningomyelocele: Should we Operate?
2. Must we Redefine Death?
3. Brain Biopsies in Children.
4. Would you let a Nurse Practitioner or a Physician's Assistant Take Care of your Best Friend?
5. Private Rights & Public Health.
6. Attempted Suicide: What Constitutes Medical Care.
7. Is it Right to Prescribe Stimulant for Hyperactive Children with Learning Problems?
8. Kidney Failure & Hemodialysis: Should Everyone be Treated?
9. Intrauterine Diagnosis in Early Pregnancy: Fetal, Parental & Societal Considerations.
10. Informed Consent: is it Possible or Even Always Desirable?
11. Sterilization Before Reproduction: The Right to Choose.
12. Sex-Change Treatment: Medical & Social Aspects.
13. The Battered Child Syndrome.
14. Prevention or Cure: Do Medical Schools Have the Right Priorities?
15. Euthanasia: The Pros and Cons.
16. Behavior Modification: Treatment or Coercion?

Tapes cost $68 (or $38 if tape is provided: 1/2" reel-to-reel or 3/4" cassette). From: Lair Parent, Media Center (TV), 62-073 Health Sciences.

0370 UNIVERSITY OF CALIFORNIA MEDICAL CENTER
San Francisco, CA 94143

1. The following films & videotapes are available from MJ Garland:
    a. "Who Shall Survive," film on infant euthanasia.
    b. film & videotape of discussions of cases from Neonatal Intensive Care Nursery.

c. "Bertha," film on sterilization.

d. videotape on chronic disease--case of multiple kidney transplants.

2. Bioethics Exchange--quarterly newsletter for teachers of bioethics; college & professional school level. No charge.

0410 UNIVERSITY OF SOUTHERN CALIFORNIA
Los Angeles, CA 90007

A. 1. Bibs. & case studies on environmental management. From: Gloria Barbaro, Environmental Management Institute, School of Public Administration.

2. Index, evaluation, & uses of games & simulations. From: Richard McGinty, Center for Multidisciplinary Educational Exercises (COMEX), School of Public Administration.

B. 1. List of papers on telecommunications/transportation tradeoff available from Office of Interdisciplinary Programs. Charge for the papers is duplicating & mailing cost.

2. Summary report on workshop on management of interdisciplinary research--summary of 2-day, 9-session conference of research managers & university officials, 120pp. From: Office of Interdisciplinary Programs. $4.50.

3. Center for Futures Research (CFR), Third Annual Report, Sept 1974. Includes list of publications (request price list separately). From: CFR, Graduate School of Business Administration.

COLORADO

0470 UNIVERSITY OF DENVER
Denver, CO 80210

c01	TMIS: Technology & Modernization.	syl. From: J Szyliowicz Technology, Modernization & International Studies (TMIS)
c02	TMIS: Management & Planning of Technology.	syl. From: J Szyliowicz TMIS
c03	TMIS: Analytical Methods for Technological Decision Makers.	syl. From: J Szyliowicz TMIS
c04	TMIS: Technological Processes.	syl. From: J Szyliowicz TMIS

CONNECTICUT

0480 ALBERTUS MAGNUS COLLEGE
New Haven, CT 06511

c01 Chem/Phys/Soc: Human Life & the Environment: Some Physical & Social Dimensions.
syl. & bib.
From: EC Patterson
Phys

c02 Hist/Phys: Selected Topics in the History of Science.
syl. & bib.
From: EC Patterson
Phys

c04 PhysSci: Science & Ideas.
syl. & bib.
From: EC Patterson
Phys

0520 UNITED STATES COAST GUARD ACADEMY
New London, CT 06320

c01 Hum/Phys&OceanSci 2402: Science & Society.
outl.
From: Lt. RW Schneider

DELAWARE

0580 UNIVERSITY OF DELAWARE
Newark, DE 19711

c07 Phil 647: Science & Society Seminar.
Collection of readings put together with introductions, comments in mimeo form.
From: P Durbin

DISTRICT OF COLUMBIA

0600 GEORGETOWN UNIVERSITY
Washington, DC 20057

A. c01 CB/Theol: Bioethics.
outl. & bib.
From: L Walters
Center for Bioethics (

c02 CB/Phil: Moral Problems.
outl. & bib.
From: L Walters
CB

c13 Phil: Ethical Issues in Biomedicine.
outl. & bib.
From: TL Beauchamp

B. 1. Kennedy Institute Newsletter: quarterly. No charge.

2. Recent Publications of Scholars at the Center for Bioethics, Kennedy Institute, compiled by L Walters & D Goldstein, 18 March 1975. From: Center for Bioethics.

3. Library of Center for Bioethics: book selection service "New Titles in Bioethics." Monthly listing by subject of books, government documents, pamphlets, serial titles, & audio-visual aids acquired during previous 4 weeks. From: D Goldstein. $6/year.

4. Information Retrieval Project: by 1977, Kennedy Institute will be able to respond to searches, on demand, of bioethical literature published in English since 1973.

5. LeRoy Walters, ed., Bibliography of Bioethics. Volume I--Detroit: Gale Research Company, 1975; $24. Volume II--available Summer 1976. Center for Bioethics is developing a software package capable of computer-producing future volumes of the bibliography.

6. Core Ethics Library: Bibliography of the field of Bioethics. $2.50.

7. Warren Reich, ed., Encyclopedia of Bioethics, Center for Bioethics. Scheduled for completion in 1977. Preview of 2 articles in Kennedy Institute Newsletter, Winter 1975.

0610 GEORGE WASHINGTON UNIVERSITY
Washington, DC 20052

1. Program of Policy Studies in Science & Technology, Publications, Reports, Books--May 1974. Limited supply available at no charge.

0640 THE NATIONAL WAR COLLEGE
Washington, DC 20319

A. c01 Energy Issue & Resource Scarcity. syl. From: Col. HW Emrick

c02 Geography, Technology & the Interconnected World. syl. From: Col. HW Emrick

B. 1. Forum, quarterly publication on current topics of national security interest. No charge.

FLORIDA

0670 FLORIDA INTERNATIONAL UNIVERSITY
Miami, FL 33144

c02 PubAdm 550: Values & Technology in the Post-Woodstock Generation. Reprint of article From: JS Mendell

GEORGIA

0730 CLARK COLLEGE
Atlanta, GA 30314

1. CASP Progress Report: description of 8 years of research in curriculum development & evaluation. From: OP Puri. No charge.

0760 GEORGIA INSTITUTE OF TECHNOLOGY
Atlanta, GA 30332

A. 1. Technology Policy — organized collection of readings From: A Porter

B. 1. Environmental Resources Center, Annual Report, August 1974. Presents & summarizes research program in water resources for FY 1974. Free for single copies.

2. Clarke, "Mental Health Implications of Housing."

3. Wilson, "Mental Health Implications in Architectural Design."

IDAHO

0840 THE COLLEGE OF IDAHO
Caldwell, ID 83605

A. 1. Developing interdisciplinary course outline in Human Ecology. From: L Stanford.

B. 1. Xeroxed material on the Human Ecology Dimension Program. 10¢/copy.

2. Several papers on various programs developed by the Regional Studies. From: Regional Studies.

ILLINOIS

0870 DE PAUL UNIVERSITY
Chicago, IL 60614

1. Brief syl. available on all courses listed. From: individual instructors.

0900 ILLINOIS INSTITUTE OF TECHNOLOGY
Chicago, IL 60616

A. c04 PolSci 332: Science & Public Policy. bib. & outl.
From: PH De Forest
Dept. of PolSci

Reading material used in theme and other special seminars being collected & will be made available.

B. 1. Progress reports & reprints of papers & publications in various journals on the Education & Experience in Engineering Program are available without charge from TP Torda.

2. "The Political Economy of Science: Reflections on Science & Policy in Contemporary America," 1972 (paper). From: PH De Forest, Dept. of PolSci. No charge.

3. "The International Scientific Community & the Global Social Responsibility of Scientists," 1975 (paper). From: PH De Forest, Dept. of PolSci. No charge.

0950 NORTHWESTERN UNIVERSITY
Evanston, IL 60201

1. Center for the Interdisciplinary Study of Science & Technology (CISST) publishes the CISST Newsletter, an occasional publication describing current activities of the Center, including a calendar of seminars & lectures sponsored by CISST. No charge.

1010 SOUTHERN ILLINOIS UNIVERSITY MEDICAL SCHOOL
Springfield, IL 62708

1. Syl. available for courses within Medical Education, Society, & the Humanities program. From: G Davidson.

1030 UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE
Chicago, IL 60690

I. c06 PolSci: Science, Technology, & Public Policy. syl. From: B Keenan

c07 PolSci: The Public Administration of Science & Technology. syl. From: B Keenan

c08 PolSci: Environmental Politics. syl. From: LM Wenner

INDIANA

1070 INDIANA UNIVERSITY
Bloomington, IN 47401

1. Science, Technology, & Public Policy: A Syllabus for Advanced Study, II (revised edition available 1976). From: LK Caldwell or Mrs. Jan Lundy, Secretary, Dept. of PolSci.

2. Science, Technology, & Public Policy: A Guide to Advanced Study, revised edition, 1972. From: LK Caldwell or Mrs. Jan Lundy, Secretary, Dept. of PolSci. $4.50.

3. Environmental Policy, Law, & Administration: A Guide to Advanced Study, 1974. From: LK Caldwell or Mrs. Jan Lundy, Secretary, Dept. of PolSci. $6.50.

4. Environmental Studies: Papers on the Politics & Public Administration of Man-Environment Relationships, Nos. I-IV, 1967. From: Institute of Public Administration, Dept. of PolSci. Four volume set. $6.

5. Organization & Administration of Environmental Programs, 1974 [E/74/II/H/5]. From: Public Administration Division, Dept. of Economic & Social Affairs, UN Headquarters. $8.

6. Science & Public Policy in the American University: Papers Presented at a Conference, 1969. From: LK Caldwell or Mrs. Jan Lundy, Secretary, Dept. of PolSci. $3.

7. Science, Technology, & Public Policy: A Selected & Annotated Bibliography, Vol. III. From: LK Caldwell or Mrs. Jan Lundy, Secretary, Dept. of PolSci. (Vols. I & II out-of-print.) $6.50.

1100 PURDUE UNIVERSITY
West Lafayette, IN 47907

A. I. Energy Policy simulation & bib. From: J Haberer

B. 1. Technology & the Future of Man, 3rd Annual Grissom-Chaffee Memorial Lectures (Haberer, ed.), 1973, 55pp. No charge.

2. Program on Science, Technology, & Public Policy (STPP) issues the STPP Newsletter, an interdisciplinary newsletter of ideas & materials. Published monthly except during summer; 8-14pp. No charge. To be placed on mailing list, contact Editor, STPP News, Dept. of PolSci.

3. Syllabi Depository List: a brief, coded description of syllabi in the science, technology, & society area that are in the STPP Syllabi Depository.

4. Over the next few years, the first 3 volumes of Purdue University Studies in Science, Technology, & Human Values will be produced. Contact: Dean LE Trachtman, Humanities, Social Science, & Education.

IOWA

1180 IOWA STATE UNIVERSITY
Ames, IA 50010

The following are available from the Program on Technology & Social Change in Foreign Cultures:

1. Nils C. Westermarck, "Lectures for Program on Technology & Social Change in Foreign Cultures."
2. Core Bibliography on Technology & Social Change in Foreign Cultures.
3. Supplement to Core Bibliography on Technology & Social Change in Foreign Cultures.
4. Bibliography on Technology & Social Change in China & Japan.
5. The Impact of the Oil Technology on Iran, 1901-1951.

1220 UNIVERSITY OF IOWA SCHOOL OF MEDICINE
Iowa City, IA 52242

1. Final Report of Behavior, Law & Ethics Committee Meetings for 1975. Includes case studies. Contact: C Johnson, Pediatrics.

LOUISIANA

1340 TULANE UNIVERSITY
New Orleans, LA 70118

1. Roland H. Ebel, ed., Perspectives on the Energy Crisis: A Symposium, New Orleans: Ponchartrain Press, September 1975. $4.50.

2. Jane C. Keller & George R. Webb, Conflict & Community in the University: The Implementation & Evaluation of a Program of Technology Assessment, 1973. Includes some course outlines. $1.

MARYLAND

1390 LOYOLA COLLEGE
Baltimore, MD 21210

c02 Phys/Eng III: Science in Society. outl., bib., notes, & handout
From: MT Myers

1410 UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE
Baltimore, MD 21201

c01 Legal Medicine. outl.

c02 Medical Ethics. outl.

1420 UNIVERSITY OF MARYLAND
College Park, MD 20742

A. 1. Course descriptions will be available in Jan 1977 in booklet format for Philosophical Issues in Public Policy courses.

B. 1. CHPS News, Newsletter of the Committee of the History & Philosophy of Science. Contact: F Suppe. No charge.

2. Medical Ethics Film Review Project Report, resulting from the Council for Philosophical Studies 1974 Institute on Moral Problems in Medicine. From: S Gorovitz, Council for Philosophical Studies, Skinner Hall 1131. No charge.

MASSACHUSETTS

1440 BABSON COLLEGE
Babson Park, MA 02157

1. Program description booklet for Society & Technology.

1450 BOSTON UNIVERSITY
Boston, MA 02215

c01	CLA PY [Physics (Interdisciplinary)] 134: Modern Physics & Political Problems.	bib., outl., & assignments From: Stachel
c02	CLA PY 138: Science & Religion.	bib., outl., & assignments From: RS Cohen
c03	CLA PY 139: Beauty, Mathematics & Science.	bib., outl., & assignments From: P Roman
c04	CLA PY 232: Human & Scientific Dimensions of the Technological Age.	bib., outl., & assignments From: Siegel
c05	CLA PY 235: History of Physical Science.	bib., outl., & assignments From: RS Cohen
c06	CLA PY 237: Science in Literature.	bib., outl., & assignments From: Siegel
c07	CLA PY 239: Gifts of Science--Hopes & Fears.	bib., outl., & assignments From: Kowarski
c08	CLA PY 331: Einstein--the Man, the Times, the Achievement.	bib., outl., & assignments From: Stachel

1460 BOSTON UNIVERSITY SCHOOL OF LAW
Boston, MA 02215

A. 1. Outlines are available for all seminars offered by the Center for Law & Health Sciences (LHS) from the instructors.

B. 1. "Annual Report: 1974-75" lists publications of the Center for Law & Health Sciences.

1520 COLLEGE OF THE HOLY CROSS
Worcester, MA 01610

c03	SpecialStudies: Evolution & its Impact on Contemporary Culture.	description of proposed sequence of courses From: Beyea
c04	Chem 44: Chemistry & Society.	outl. & bib. From: GA Vidulich

1540 GARLAND JUNIOR COLLEGE
Boston, MA 02215

c01 ID 107: Science in America.	outl. & bib. From: Goldhaber or Sanborn
c02 Sci 106: Ecology I.	outl. & bib. From: Goldhaber

1550 HAMPSHIRE COLLEGE
Amherst, MA 01002

c03 NatSci 180: Technology Assessment.	bib. From: A Krass or L Wilcox
c04 NatSci 181-182: The Energy Crisis.	syl., bib., videotapes of guest lectures

1560 HARVARD UNIVERSITY
Cambridge, MA 02138

1. A Perspective on Information Resources, The Program in Review, 1973-74, Program on Information Technologies & Public Policy. Includes list of publications. From: Program Office, 200 Aiken Computation Laboratory.

2. Kennedy Interfaculty Program in Medical Ethics at Harvard University, Progress Report, July 1, 1973-June 30, 1974. Contact: WJ Curran, School of Public Health.

3. Newsletter of the Program on Public Conceptions of Science: quarterly. Includes bibliographic materials & information about variety of activities (courses, symposia, etc.) related to the ethics & science area. No charge. From: Program on Public Conceptions of Science, 358 Jefferson Physical Laboratory.

1570 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Cambridge, MA 02139

1. Lists of lectures, seminar descriptions, & transcripts of reading materials used in faculty seminar available from Technology & Culture Seminar office. Contact: Rev. J Crocker, Jr., 312 Memorial Drive. $1.

2. Technology Studies Bulletins #2 (Jan 1974) & #3 (May 1974) available from Technology Studies Program office. No charge.

3. Publications of the Energy Laboratory are listed in "Energy Laboratory Reports Currently Available from the National Technical Information Service, Springfield, VA 22151." From: Nancy Stauffer, Energy Laboratory.

4. Objectives, Organization & Programs of the MIT Energy Laboratory, Feb 1975. From: Nancy Stauffer, Energy Laboratory.

5. Program in Science, Technology & Public Policy (STPP) has produced Science & Public Policy: An Introductory Bibliography, HM Sapolsky with Daniel Rich, April 1969. Reprinted in Science & Public Policy, Seminar Readings, National Institute of Health (Oct 1968).

6. STPP has available A Statistical Guide to Science & Public Policy, 2 editions: Sept 1968 & Sept 1969, HM Sapolsky with Sanford Weiner.

7. An extensive list of publications is available from the Center for International Studies, Publications office. Write for listing & prices.

1590 NORTH SHORE COMMUNITY COLLEGE
Beverly, MA 01915

c01 PEHT 81102: Principles of Public Health II. outl.

c02 PEHT 81211: Public Health Law I. outl.

1710 WORCESTER POLYTECHNIC INSTITUTE
Worcester, MA 01609

1. "Descriptions of Interactive Projects Developed in the Alfred P. Sloan Program, Summer 1974." Contact: JS Demetry, Interactive Qualifying Project Center.

2. "Abstracts of Completed Projects," available from Interactive Qualifying Project Center. Contact: JS Demetry.

MICHIGAN

1740 DELTA COLLEGE
University Center, MI 48710

c01 Sci: Chemistry & the World. outl. & objectives
From: C Most

1770 MICHIGAN STATE UNIVERSITY
East Lansing, MI 48824

1. D Wright & R Snow, "Coney Island: The Mechanization of American Leisure," mimeographed article, 16pp. No charge.

1780 UNIVERSITY OF DETROIT
Detroit, MI 48221

c05	Phil 418: Technology & Society.	notes, outl., & syl. From: V Adams
c06	Phil 474: Philosophy of Science.	outl. & syl. From: Wallenmaier
c08	RelStud 284: Death & Dying in a Technological Age.	syl. & notes From: Maxey
c09	RelStud 558: Bioethics & the Future of Man.	syl. & bib. From: Venkataswaran

1790 UNIVERSITY OF MICHIGAN
Ann Arbor, MI 48104

The following booklets are available from the Center for Research on Utilization of Scientific Knowledge (CRUSK):

1. CRUSK Short Reports: lists journal articles, technical reports, & unpublished papers available.
2. CRUSK Reports on Assorted Topics: packages of reports grouped by areas of focus.
3. CRUSK Longer Reports.
4. CRUSK Reports on Knowledge Utilization & Social Research.
5. Books & Monographs from the Staff of the CRUSK.

1810 WAYNE STATE UNIVERSITY
Detroit, MI 48202

1. Mark S. Frankel, "The Public Policy Dimensions of Artificial Insemination & Human-Semen Cryobanking," monograph No. 18. Examines the ethical, legal, & social implications of artificial insemination & human-semen cryobanking; reviews existing policy.

MINNESOTA

1830 CARLETON COLLEGE
Northfield, MN 55057

c01	Coll 61:	Technology & Human Values.	bib. & outl. From: I Barbour
c02	Coll 62:	Environmental Ethics.	bib. & outl. From: I Barbour
c03	Coll 63:	Scientists & Government.	bib. & outl. From: B Casper or N Vig
c04	Coll 64:	Energy Policy.	bib. & outl. From: J Finholt or T Pender
c05	Coll 65:	The Limits to Growth Debate.	bib. & outl. From: I Barbour
c06	Coll 66:	Biomedical Ethics.	bib. & outl. From: I Barbour

1840 UNIVERSITY OF MINNESOTA
Minneapolis, MN 55455

1. Impact of Technology on Society: a bibliography. Contact: KSP Kumar, ElecEng. No charge.

MISSOURI

1880 NORTHEAST MISSOURI STATE UNIVERSITY
Kirksville, MO 63501

1. Missouri Environmental Studies Approach: quarterly newsletter for participants, former participants, & their superintendents in environmental studies. No charge.

1890 ST. LOUIS UNIVERSITY
St. Louis, MO 63103

1. Reports from Institute for the Theological Encounter with Science & Technology (ITEST) conferences: publication of major papers & selected discussions. Contact: R Brungs, S.J.

1930 WASHINGTON UNIVERSITY
St. Louis, MO 63130

I. Technology & Human Affairs (THA) & Center for Development Technology (CDT) put out an extensive series of THA & CDT reports. A list of titles is available upon request. Contact: THA/CDT program office.

NEW JERSEY

2040 NEW JERSEY INSTITUTE OF TECHNOLOGY
Newark, NJ 07102

I. Actual case studies/models drawing upon actual experiences of lecturers for course in technology & society. From: S Bordman or Gordon.

2050 PRINCETON UNIVERSITY
Princeton, NJ 08540

A.	c01	SHA 324: Medicine in Modern America.	syl. & handouts From: secretary of Program in History & Philosophy of Science (HPS)
	c02	CivEng 313: Technology & Society Seminar I: Present & Future Challenges.	syl. & handouts From: secretary of HPS
	c03	CivEng 314: Technology & Society Seminar II: Problems in the Human Environment.	syl., outl., bib., & handouts From: SM Slaby
	c04	Phys/Geol&GeophysSci 333: Seminar on the Impact of Science on Modern Society: Water Pollution.	syl. & handouts From: secretary of HPS
	c05	Phys/Geol&GeophysSci 334: Seminar on the Impact of Science on Modern Society: Air Pollution.	syl. & handouts From: secretary of HPS
	c06	Soc 335: Medicine, Law & Other Professions.	syl. & handouts From: secretary of HPS
	c07	Soc 356: The Sociology of Science.	syl. & handouts From: secretary of HPS
	c11	Hist 291: The Origins of Modern Science 1500-1750.	syl. & handouts From: secretary of HPS
	c12	Hist 392: The Scientific World View of Antiquity & the Middle Ages.	syl. & handouts From: secretary of HPS
	c13	Hist 393: Science in the Modern World.	syl. & handouts From: secretary of HPS

c14	Hist 494: Historical Studies in Medicine, Disease, & Society.	syl. & handouts From: secretary of HPS
c16	Pol 314: Science, Technology, & Politics.	syl. & handouts From: secretary of HPS
c18	Pol 326: Technology & International Relations.	syl. & handouts From: secretary of HPS

B. 1. Student reports resulting from Technology & Society Seminars are available on the subjects of Public Housing (June 1973), Mass Communication (June 1974), & Solid Waste Management (Spring 1971). Contact: SM Slaby. $3.75.

2. Princeton University Council on Environmental Studies, Environmental Course Handbook; Undergraduate Courses Related to Environmental Studies, April 1973. Contact: Center for Environmental Studies.

2080 STEVENS INSTITUTE OF TECHNOLOGY
Hoboken, NJ 07030

1. "Technology & Society at Stevens Institute of Technology": brochure. No charge. Contact: program office, Technology & Society Curriculum.

NEW MEXICO

2110 UNIVERSITY OF NEW MEXICO
Albuquerque, NM 87131

A. c01	PA 595: Seminar: Public Science Policy & Administration.	bib. & syl. From: AH Rosenthal

B. 1. Albert H. Rosenthal, Robert F. Wilcox, & Frank Marini, Science Leadership for Tomorrow; The Role of Schools of Public Affairs & Universities in Meeting Needs of Public Science Agencies, November 1973. Supply limited. From: AH Rosenthal. No charge.

2. Vladimir V. Berniklau & Charles E Spath, Science Administration Leadership for Tomorrow; a five year review & analysis of the Program for Advanced Study in Public Science Policy & Administration at the University of New Mexico, June 1975. Supply limited. From: AH Rosenthal. No charge.

NEW YORK

2220 CORNELL UNIVERSITY
Ithaca, NY 14853

The following lists of available materials can be obtained from the Peace Studies Program office, 164 Uris Hall:

1. List of Occasional Papers.
2. List of Rural Development Monographs.

The following materials are available from the Program on Policies for Science & Technology in Developing Nations (PPSTDN), 180 Uris Hall:

1. Listing of "Reports & Publications on Projects Sponsored by PPSTDN."
2. "Science & Technology for International Development: A Selected List of Information Sources in the US & Bibliography of Selected Materials." $5.
3. PPSTDN Annual Report, 1974-1975.

The following materials are available from the Program on Science, Technology, & Society, 632 Clark Hall:

1. Science, Technology, & Society at Cornell University: A Guide to Courses & Curricula: annual. No charge.
2. Curriculum Innovation, Spring 1972 (new edition in preparation). No charge.
3. Third General Report, September 1976. No charge.
4. Publications, Summer 1976. No charge.
5. Science, Technology, & Society: A Guide to the Field.

The following materials are available from the Research Program on Social Analyses of Science Systems (SASS), 323 Uris Hall:

1. SASS Action: newsletter issued occasionally by program. No charge.
2. SASS Working Papers: listing of publications available from program.

2230 CORNING COMMUNITY COLLEGE
Corning, NY 14830

1. Science in the 20th Century: A Chronology. From: J Vikin, Sci Dept.

2250 DUTCHESS COMMUNITY COLLEGE
Poughkeepsie, NY 12601

c01 Econ 354: Socio-Economic Causes & Consequences of Technological Progress. bib. & notes From: M Parvin

2270 HAMILTON COLLEGE
Clinton, NY 13323

1. "Science, Technology, & Public Policy: Bibliography of Holdings--Daniel Burke Library, Hamilton College, Clinton, NY." From: RP Suttmeier, Govt.

2310 ITHACA COLLEGE
Ithaca, NY 14850

1. "Teaching a Physics & Society Course." From: C Spencer, Phys Dept.
2. "Critical Reading List for Teachers of Physics-&-Society Courses." From: C Spencer, Phys Dept.

2400 RENSSELAER POLYTECHNIC INSTITUTE
Troy, NY 12181

A. c01 HDC (Human Dimensions Center) 45.101: Science, Technology & Values. syl. & bib. From: S Restivo, Soc Dept.

c02 HDC 45.201: Transnational Values & Technology. syl. & bib. From: R Anderson, Phil Dept.

c07 Hist/PolSci 53.298: Science, Technology, & Public Policy. syl. & bib. From: D Livingston, PolSci Dept.

c08 Hist/PolSci 53.2972: Futuristics, Survival, & World Order. syl. & bib. From: D Livingston, PolSci Dept.

c10 Phil 48.250: Life, Death & Human Experimentation. notes & bib. From: R Anderson

B. 1. HDC planning to initiate a new journal, Human Dimensions of Science & Technology.

2. First Annual Report, Center for the Study of the Human Dimensions of Science & Technology, June 30, 1975. From: HDC program office.

2470 STATE UNIVERSITY OF NEW YORK AT BINGHAMTON
Binghamton, NY 13901

1. "Selected List of Publications Available from the Center for Integrative Studies" (CIS), January 1973, and "List of Publications" available from CIS office.

2490 STATE UNIVERSITY OF NEW YORK AT STONY BROOK
Stony Brook, NY 11794

c10	Hist 136: Technology in History.	outl. & bib. From: R Cowan
c13	Phys: The Science Establishment in the US.	reference lists on specific topics From: L Paldy

2510 STATE UNIVERSITY OF NEW YORK COLLEGE OF ENVIRONMENTAL SCIENCE & FORESTRY
Syracuse, NY 13210

1. ESF News: news releases, many of which deal with issues related to science, technology, & society.

2580 SYRACUSE UNIVERSITY
Syracuse, NY 13210

A.	c14	PolSci 800: The Political Dynamics of Large-Scale Technological Programs.	syl. From: CR Knerr, Jr. 200 Maxwell Hall
	c15	PubAd 730: Post-Industrial Administration.	syl. From: CR Knerr, Jr. 200 Maxwell Hall
	c16	PubAd 930: The City & Technological Change.	syl. From: CR Knerr, Jr. 200 Maxwell Hall

B. 1. Maxwell Review: a bi-annual journal of the social sciences, published by the Maxwell Graduate School; often contains articles of topical interest.

NORTH CAROLINA

2650 BELMONT ABBEY COLLEGE
Belmont, NC 28012

c01 EnvSci 302: Man & His Environment. — bib. of books & journal articles indexed to relate to course syl. & revised 2x/yr; about 700 references. $1.50.
From: WH Hartford
Dept. of EnvSci

2710 UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Chapel Hill, NC 27514

A. c03 CompSci 96: Man & Computers. — outl. & bib.
From: SM Pizer

B. The following materials are available from LD Kornreich, Director of the Triangle Universities Consortium on Air Pollution (Duke University, North Carolina State University, University of North Carolina at Chapel Hill). They can be obtained from the following address: P.O. Box 2284, Chapel Hill, NC 27514.

1. Short Course in Air & Environmental Law: course outl.
2. Land Use Planning to Reduce Air Pollution: packaged course.
3. Transportation Systems: packaged course.
4. What is Transportation Planning: packaged course.
5. Health Effects of Air Pollution: self-instructional package.
6. Population Forecasting: self-instructional package.
7. Fundamentals of Zoning: slide/script presentation.
8. Proceedings of the National Conference on the Clean Air Act, October 1973. $5.
9. Proceedings of the Conference on Land Use Planning, Transportation Planning, November 1974. No charge.
10. Triangle Universities Consortium on Air Pollution: catalogue of faculty & courses in air pollution studies, 1974. $1.

OHIO

2840 URSULINE COLLEGE
Cleveland, OH 44124

c01 ID: Science, Technology, & Human Values. syl.
From: Sr. Ann Gertrude

OKLAHOMA

2900 UNIVERSITY OF OKLAHOMA
Norman, OK 73069

A. 1. Science & Public Policy bib.
From: DE Kash
Sci & Public Policy
Program (SPPP)

B. 1. SPPP has available a list of "Articles & Published Papers" & of "Science & Public Policy Projects." From: SPPP, 601 Elm Ave., Room 432.

OREGON

2940 PORTLAND STATE UNIVERSITY
Portland, OR 97207

1. A major activity of the Futures Research Institute (FRI) is the editing of Technological Forecasting & Social Change, an international journal published by American Elsevier Publishing Company. It is edited by HA Linstone, Director of FRI.

The following monographs are available from FRI:

1. The ORE Plan for Recycling Household Solid Waste--An Alternative Garbage Collection System.
2. QSIM--A Low Budget Approach to Modelling & Forecasting.
3. Undoing the Bias of an Engineering Education.
4. Communications in Futures Research.
5. Four American Futures: Reflections on the Role of Planning.
6. On Discounting the Future.
7. A Massive Challenge to Academia.

8. The Paradigms of Futurists.

9. Old & New American Futures: The End of an Era?

10. Technological Forecasting: A Glance at the State of the Art.

PENNSYLVANIA

3080 DUQUESNE UNIVERSITY SCHOOL OF LAW
Pittsburgh, PA 15219

1. Weinstein, Twerski, Piehler, & Donaher, "Product Liability: An Interaction of Law & Technology," Duquesne Law Review, Vol. 12, Spring 1974, #3. An outline & treatment of concept of strict liability in area of products & the consequences for society & technology. With supplemental materials & commentary. Contact: WA Donaher. $2.50.

3140 LAFAYETTE COLLEGE
Easton, PA 18042

1. EPNE Newsletter: an occasional newsletter describing engineering studies for non-engineers. From: EV Krick, EPNE (Engineering Programs for Non-Engineers) Center. No Charge.

3150 LEHIGH UNIVERSITY
Bethlehem, PA 18015

A. 1. Short course descriptions & syl. available for all Humanities Perspectives on Technology (HPT) courses. From: EJ Gallagher.

B. 1. Lex et Scientia, Vol. 10: Dr. Carroll Pursell's Mellon Lecture Series: "Belling the Cat: A Critique of Technology Assessment," "A Savage Struck by Lightning: The Idea of a Research Moratorium, 1927-37," & "Who to Ask Besides the Barber--Suggestions for Alternative Assessments." From: EJ Gallagher, HPT. $2.95.

The following bibliographies are available from EJ Gallagher, HPT:

1. Humanistic Perspectives on the Computer.

2. Humanistic Perspectives on the City.

3. Women in Engineering.

3200 PENNSYLVANIA STATE UNIVERSITY
University Park, PA 16802

A. c02 STS (Science, Technology, & Society) 198: Wilderness & Technological Man: Values, Policies, & Decisions.

bib. on wilderness & filmstrip in preparation
From: R Price
Dept. of Phil

c04 STS 198E: The Behavioral Revolution.

study guides, audio tapes, & video cassettes
From: P Becker
Dept. of FuelSci

c06 STS/Eng 410: Technology: its Character, Role, & Function.

design projects, case studies, bib., & outl.
From: R Heinsohn
Dept. of MechEng

B. The following materials are available without charge from E Hawk, 102 Materials Research Laboratory:

1. Final Report--Workshop on Goals & Methods of Assessing the Public's Understanding of Science.
2. Science-Technology: The Creator's Apprentice--A Program of Interpretation & Dialogue Between the Science-Technology Community & the Church: brochure.
3. The Relevance of Science for Practical Theology: A Weekend Colloquy with Carl Friedrich von Weizsacker: brochure.
4. Budgeting the Earth: A Look at Resources & Technology: brochure.

The following materials are available without charge from the Environmental Resource Management Program, 216 Tyson Building:

1. Only One Earth--A Digest of Environmental Information: quarterly.
2. Environmental Impact Assessment Methodologies: bibliography.
3. Up-to-date bibliographies dealing with management & decision making with direct application to environmental & resource problems.

The following newsletter is available from 102 Materials Research Laboratory:

1. Input Project News (Increasing Public Understanding of Technology).

3210 MILTON S. HERSHEY MEDICAL CENTER OF THE PENNSYLVANIA STATE UNIVERSITY
Hershey, PA 17033

1. Abortion & Euthanasia: an annotated bibliography. Contact: Dept. of Hum. No charge.

2. Literature & Medicine: Topics, Titles & Notes: lengthy annotated bibliography covering treatments of 40 medical topics such as "The Body," "Works by Doctors," "Death," "Medical Ethics," "Sexuality," & "Women as Patients." From: Society for Health & Human Values, 723 Witherspoon Building, Philadelphia, PA 19107.

3260 UNIVERSITY OF PITTSBURGH
Pittsburgh, PA 15260

A.	c03	Biophys&Microbio 142: Survey of Parapsychology.	evidential & sociological bibs. From: RA McConnell

B. 1. Charles O. Jones, Clean Air: The Policies & Politics of Pollution Control, 380pp. Book analyzing extraordinary development of policy beyond capability in air pollution control. $13.95.

2. M.L. Williams, "Academia & the Limits of Growth: Bid or Pass?" Paper-bound booklet. Contact: ML Williams, Dean, School of Eng. Charge: cost of postage.

3. "The Engineer & Society," Pitt Magazine, March 1975 (Vol. 30, No. 1). Contact: Pitt Magazine, 4200 Fifth Ave., Pittsburgh, PA 15260.

4. "Prospectus for the Report on Ethics in Psychiatry." From: Editor, Report on Ethics in Psychiatry, Western Psychiatric Institute & Clinic, 3811 O'Hara St., Pittsburgh, PA 15261.

RHODE ISLAND

3310 BROWN UNIVERSITY
Providence, RI 02912

c01	Eng 93A: The Automobile vs. the Environment.	bib. & notes From: McKinzie
c02	Eng 93B: Electrical Communication.	bib. & notes From: Kornhauser
c03	Eng 94B: Impact of Western Science & Technology on Non-Western Societies.	bib. & notes From: Glicksman

SOUTH CAROLINA

3330 CONVERSE COLLEGE
Spartanburg, SC 29301

The following articles, written &/or edited by Maxwell H. Goldberg, are in the general area of technological change, human values, & future studies. They can be obtained from Dr. Goldberg.

1. "Automation, Education, & Human Values."
2. "Needles, Burrs, & Bibliographies."
3. "Technological Change & Human Dignity."
4. "Blindness Research: the Expanding Features."

3350 UNIVERSITY OF SOUTH CAROLINA
Columbia, SC 29208

A. c05 Govt&IntnlStud 431: Science, Technology, & World Politics. — bib. & syl. From: H Silverstein

B. 1. R.G. Wirsig, International Relations & the Future of Ocean Space, University of South Carolina Press, 1973. $5.95.

3360 VORHEES COLLEGE
Denmark, SC 29042

c01 SocSci 399: Culture & Human Values. — modules From: CA Roberts

c02 SocSci 490: Man & His Environment. — modules From: CA Roberts

TENNESSEE

3420 MARYVILLE COLLEGE
Maryville, TN 37801

A. c01 Phil 321: Alternative Futures. — syl. From: D Young

c02 Sci 101: Science Thought. — syl. From: D Young

c03 Sci 201: Science & Technology. — syl. From: D Young

c04 Sci 401: *Biomedical Ethics*.
syl.
From: D Young

B. 1. *Futurethoughts*: a communication paper to explore impressions of the future. Contact: D Young. $6/yr.

3430 VANDERBILT UNIVERSITY
Nashville, TN 37235

c01 SE (Socio-Engineering) 150: *Dynamics of Change: the Impact of Technology on Society*.
outl. & notes for modules on population & energy
From: RS Goodrich

c03 SE 200: *Principles of Technology*.
notes (approximately 400pp.)
From: RT Nash

c06 SE 275: *Technology Forecasting & Assessment*.
outl. & bib.
From: RS Goodrich

c10 URDC 375: *Pollution Issues*.
syl.
From: FL Parker

TEXAS

3490 NORTH TEXAS STATE UNIVERSITY
Denton, TX 76203

A. c01 Econ 530: *Graduate Seminar in the Economics of Technological Innovation*.
partial bib. in selected areas
From: MJ Davidson

B. 1. M.J. Davidson & J.B. Spalding, "Reversing a Condemnation of Surface Geochemical Prospecting for Petroleum," unpublished manuscript, 50pp. Charge: cost of xerox & handling.

3540 TEXAS A&M UNIVERSITY
College Station, TX 77843

c12 Phil 205: *Technology & Human Values*.
bib. & a-v aids
From: LA Hickman

VERMONT

3620 GODDARD COLLEGE
Plainfield, VT 05667

1. "Videotapes from the 1973 Goddard College Conference on Social Ecology": brochure describing tapes available for rent. Tapes are available at a rate of $10/tape or $30 for a set of 4. Contact: Social Ecology Tapes, Learning Aids Center.

VIRGINIA

3660 CHRISTOPHER NEWPORT COLLEGE
Newport News, VA 23606

1. D. Little, J. Webb, & G. Webb, The Man & the Alligator: Ethical Decision-Making. An ethical decision-making, primer-game; used in workshops for citizens. Revised version, Fall 1975. Contact: J Webb or G Webb.

WASHINGTON

3750 UNIVERSITY OF WASHINGTON
Seattle, WA 98195

The following books are available from the University of Washington Press:

1. Weather Modification, 1969. $7.95.
2. The Fisheries: Problems in Resource Management, 1965. $6.50.
3. Water Resources Management, 1968. $9.50.
4. Ocean Resources, 1973. $8.50.
5. World Fisheries Policy, 1973. $9.50.

WISCONSIN

3820 ALVERNO COLLEGE
Milwaukee, WI 53215

c03 BioSci 121: Microbiology.	self-study value program, worksheets From: Env Division

c04 Ed: *Global Dimensions of Education.*
bib., simulation activities, outl.
From: Env Division

c05 EnvStud 061: *Environmental Awareness.*
bib. & media material
From: Env Division

3830 LAKELAND COLLEGE
Sheboygan, WI 53081

c01 GenlStud 141: *Future Studies.*
syl. & bib.
From: C Rolli

3920 UNIVERSITY OF WISCONSIN-MILWAUKEE
Milwaukee, WI 53201

1. *Curriculum Booklet; Cultural & Technological Studies Program* (CTS), November 1975. Contact: RH Merritt, CTS.

3930 MEDICAL COLLEGE OF WISCONSIN
Milwaukee, WI 53233

A. 1. *Introduction to Health Care Delivery.*
coursebook in press
From: S Shindell

B. 1. "Ethics of Medical Practice," reprint of Chapter 13 in Tice's *Practice of Medicine.* Contact: S Shindell. No charge.

3950 UNIVERSITY OF WISCONSIN-STOUT
Menomenie, WI 54751

c01 IndustrialTeacherEd: *Impact of Industry & Technology.*
outl., handouts, & bib.
From: LH Smalley

B. PERIODICALS: A SELECTED LIST*

Further References

Ulrich's International Periodicals Directory, 16th ed., 1975-76. New York: RR Bowker Co., 1975.

UNESCO. Division of Science and Technology Policies. Provisional World List of Periodicals Dealing with Science and Technology Policies, Science Policy Studies and Documents No. 33(2). Paris: The Unesco Press, 1974.

NOTE: Subscription prices are annual unless otherwise indicated.

---

*The editors would like to acknowledge the Trustees of Columbia University in the City of New York for their permission to quote sections of A Guide to Serial Publications Reporting on Science Affairs, Survey II, revised ed. by E. Weis and R. Kulkowsky, Institute for the Study of Science in Human Affairs, Columbia University, 1969.

ADELPHI PAPERS. The International Institute for Strategic Studies, 18 Adam St., London WC2N 6AL, England. 8-10x/yr.; $1.50 each.
Contains a wide range of analytical work on issues of war, conflict, and arms control on an international basis.

THE ADVANCEMENT OF SCIENCE. The British Association for the Advancement of Science, Academic Press, Inc., 111 5th Ave., New York, NY 10003. Quarterly, f. 1939.
Aims at keeping scientists informed of developments in every field of science and technology and promoting wider public understanding of science. Contains articles and book and film reviews.

AMBIO: A Journal of the Human Environment Research and Management. Royal Swedish Academy of Sciences, PO Box 142, Boston, MA 02113. Bimonthly; $36 institutions, $22 individuals.
Dedicated to recent work in the interrelated fields of environmental management, technology, and the natural sciences. Directed to experts, scientists in other fields, and other interested readers.

THE AMERICAN BEHAVIORAL SCIENTIST. Sage Publications, Inc., 275 S. Beverly Dr., Beverly Hills, CA 90212. Bimonthly; $24 institutions, $14.40 faculty, $12 students.
Written by and for social scientists and associated laymen; carries accounts of interdisciplinary research, articles on creativity and social invention, and comment on the relations between individual behavioral scientists and society and government. Contains an annotated bibliography. Each issue is devoted to a particular topic.

AMERICAN JOURNAL OF PHYSICS. American Association of Physics Teachers, Graduate Physics Building, State University of New York at Stony Brook, Stony Brook, NY 11794. Subscriptions: American Institute of Physics, 335 E. 45th St., New York, NY 10017. Monthly; $38.
Devoted to the instructional and cultural aspects of physical science. A majority of the articles are highly technical in nature, but the journal often contains articles on science and society. Contains book and film reviews.

AMERICAN JOURNAL OF PUBLIC HEALTH. 1015 18th St., NW, Washington, DC 20036. Monthly; $30.
Articles of issues in planning and administration of public health programs.

AMERICAN SCIENTIST. The Society of Sigma Xi, 345 Whitney Ave., New Haven, CT 06511. Bimonthly, f. 1913; $12.
Articles cover science affairs, current theory, research results and methodology for the scientist and educated layman. Extensive list of books received for review; "Scientists' Bookshelf" features guest reviews by scientific experts.

THE ANNALS OF THE AMERICAN ACADEMY OF POLITICAL & SOCIAL SCIENCE. 3937 Chestnut St., Philadelphia, PA 19104. Bimonthly; $15 paper, $20 cloth.
Articles deal with issues in intergovernmental relations; contains lengthy and thorough section of book reviews and an attached bibliography.

APPROPRIATE TECHNOLOGY. Intermediate Technology Development Group, c/o IT Publications, Ltd., 9 King St., London WC2E 8HN, England. Quarterly; $7 ($10.50 air mail to U.S.).
Deals with devices, strategies, and policies for technological advancement at lowest levels of technology in underdeveloped countries.

AVIATION WEEK & SPACE TECHNOLOGY (formerly AVIATION WEEK). McGraw-Hill Publishers, Box 430, Hightstown, NJ 08520. Weekly, f. 1916; $35.
Economic, organizational, political, technical, and other information about ongoing and planned developments in military and peaceful aviation and space systems. Includes an aerospace calendar, an editorial, and a Washington report.

BEHAVIORAL SCIENCE. University of Louisville, Health Science Center Library, PO Box 1055, Louisville, KY 40201. Bimonthly; $21 institutions, $18 individuals.
Concerned with living and non-living systems. Articles tend to be quantitative; occasionally they deal with issues concerning science and society.

BENEFIT-COST & POLICY ANALYSIS; An Aldine Annual on Forecasting, Decision-Making, and Evaluation. Aldine Publishing Co., 529 S. Wabash Ave., Chicago, IL 60605. Annual, f. 1971; $20 institutions, $14 individuals.
Presents a collection of important articles from the previous year in both benefit-cost and policy analysis which are selected on the basis of giving students an opportunity to examine general topics in science and technology.

BIOSCIENCE (formerly AIBS NEWSLETTER). American Institute of Biological Sciences, 3900 Wisconsin Ave., NW, Washington, DC 20016. Semi-monthly, f. 1951; $18.
In addition to technical articles, there are usually articles on the relation of science to government and society or on the internal organization of the sciences, particularly biology.

BULLETIN OF THE ATOMIC SCIENTISTS, A Magazine of Science and Public Affairs. Educational Foundation for Nuclear Science, 1020-24 E. 58th St., Chicago, IL 60637. 10x/yr., f. 1945; $15.
Focuses on a wide variety of issues involving the survival of mankind, including population growth, the overuse of energy, disarmament, and international cooperation in science. Written for the scientist interested in public affairs and the layman interested in the public impact of science and technology.

BULLETIN OF THE HISTORY OF MEDICINE. Johns Hopkins University Press, Baltimore, MD 21218. Quarterly, f. 1940; $20 institutions, $15 individuals.
A bibliography of the history of medicine of the U.S. and Canada is an annual feature.

BUSINESS & SOCIETY REVIEW. Warren, Gocham, and Lamart, Inc. 89 Beach St., Boston, MA 02111. Quarterly; $28.
Articles deal mainly with social responsibility of business and the relation of business to public policy and natural resources.

CARNEGIE INSTITUTION OF WASHINGTON: YEARBOOK. Carnegie Institution, 1530 P St., NW, Washington, DC 20005. Subscriptions: Academic Press, 111 Fifth Ave., New York, NY 10003. f. 1902.
A discussion of some of the basic aspects of the relation of science to society within the "Report of the President" serves as a preface to the detailed reports of the year's work of the various departments.

CERES: FAO Report on Development. Food and Agricultural Organization of the United Nations, Via della Terme di Caracalla, 00100 Rome, Italy. Bimonthly; $6.
Essays on planning, technology, and development administration on semi-popular level.

CHEMICAL & ENGINEERING NEWS. American Chemical Society, 1155 16th St., NW, Washington, DC 20036. Weekly, f. 1923; $15.
Concerned with political, educational, and scientific news in the chemical industry.

COMPUTERS & THE HUMANITIES. Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, NY 10523. Bimonthly, f. 1966; $35 institutions, $25 individuals.
Provides articles, news, and reviews of work done relating computers to the various disciplines represented by its board of scholars. The annual bibliography covers music, history, archaeology, political science, visual arts, literature, and ethnology.

COMPUTERS & PEOPLE. Berkeley Enterprises, Inc., 815 Washington St., Newtonville, MA 02160. Monthly, f. 1952; $11.50.
"The magazine of the design, applications, and implications of information processing systems."

COMPUTING REVIEWS. New York Association for Computing Machinery, 1133 Avenue of the Americas, New York, NY 10036. Monthly, f. 1960; $40 non-members.
Furnishes computer-oriented persons in mathematics, engineering, the natural and social sciences, the humanities, and other fields with critical information about all current publications in any area of the computing sciences. Covers general, methodological, technological, and theoretical topics.

CYBERNETICA. International Association for Cybernetics, Place André Rijckmans, Namur, Belgium. Quarterly, f. 1958.
Articles, in French or English, cover topics in computer applications to social problems from a systems point of view and inquiries into the philosophical implications of cybernetics.

DAEDALUS. American Academy of Arts and Sciences, 165 Allandale St., Jamaica Plains Station, Boston, MA 02130. Quarterly, f. 1958; $10/yr.; $15/2 yrs.
Issues include commissioned articles on a special subject of current interest in the humanities and the sciences.

DEVELOPMENT FORUM. Center for Economic and Social Information, United Nations, Palais des Nations, CH-1121 Geneva 10, Switzerland. Free; available in English, French, Spanish, Italian, and German.
Objective is "the effective mobilization of public opinion in support of a number of major causes to which the UN is commited."

ECOLOGIST. Edward Goldsmith, ed. and publisher, 73 Molesworth St., Wadebridge, Cornwall PL27 7DS, England. Monthly; $14.50.
Semi-popular articles, often of an activist nature.

ENERGY. Annual Reviews, Inc., 4139 El Camino Way, Palo Alto, CA 94306. Annual, f. 1976; $17.
Covers all aspects of energy, including policy.

ENERGY POLICY; International Journal on Economics and Planning of Energy. IPC Science & Technology Press, Ltd., IPC House, 32 High St., Guildford GU1 3EW, Surrey, England. IPC (America), Inc., 205 E. 42nd St., New York, NY 10017. Quarterly; $65.
Articles and book reviews that deal with the efficiency, applicability, and acceptability of different forms of energy production and conversion.

ENGINEERING EDUCATION. American Society for Engineering Education Headquarters, Suite 400, One Dupont Circle, Washington, DC 20036. 8x/yr.; free to ASEE members, $20 non-members, $5 students.
Articles on interdisciplinary teaching and issues in technology and society.

ENGINEERING ISSUES, Journal of Professional Activities. American Society of Civil Engineers, 345 E. 47th St., New York, NY 10017. Quarterly; $4 for ASCE members, non-member prices available upon request.
Includes papers presenting different views on all professional and technical problems of broad interest, especially those dealing with other disciplines, to improve communication between engineers and the public. Non-members are invited to present views on social, economic, and ecological implications of technological achievements.

ENVIRONMENT (formerly SCIENTIST & CITIZEN). Scientists' Institute for Public Information, PO Box 755, Bridgeton, MO 63044. 10x/yrs; $12.50.
Articles focus on current issues and developments relating to the natural environment, the peaceful and military uses of nuclear energy, and legislative aspects of pollution issues.

ENVIRONMENT & BEHAVIOR. Sage Publications, Inc., 275 S. Beverly Dr., Beverly Hills, CA 90212. Quarterly, f. 1969; $20 institutions, $12 individuals.
"An interdisciplinary journal concerned with the study, design, and control of the physical environment and its interaction with human behavioral systems." Articles report on theoretical and experimental work on human environments and behavioral systems, and planning or political action aimed at controlling environment or behavior.

ENVIRONMENTAL ACTION. Suite 731, 1346 Connecticut Ave., NW, Washington, DC 20036. Biweekly, except Jan., June; $15.
Published by Environmental Action, Inc., a political lobby, deals with environmental concerns and related political activity.

ENVIRONMENTAL LAW. The Lewis and Clark Law School-Northwestern School of Law, 10015 Terwilliger Blvd., Portland, OR 97219. 3x/yr.; $8.
Focuses on historical, social, scientific, and legal issues relating to the natural and human environment.

ENVIRONMENTAL SCIENCE & TECHNOLOGY. American Chemical Society, 1155 16th St., NW, Washington, DC 20036, Monthly, f. 1967; $6 members, $24 institutions, $10 individuals.
Comprehensive coverage of environmental sciences, emphasizing water, air, and waste chemistry, including reports and commentary on legislative action and current research. Book reviews, meeting guide, and an annual Pollution Control Directory.

ETHICS IN SCIENCE & MEDICINE (formerly SCIENCE, MAN & MEDICINE). Pergamon Press, Headington Hill Hall, Oxford OX3 0BW, England. U.S.: Pergamon Press, Maxwell House, Fairview Park, Elmsford, NY 10523. Quarterly; $40 library, $25 personal.
Articles on policy, ethics, and science, primarily life science, by leading authors. Book reviews.

FIELDS WITHIN FIELDS. World Institute Council, 777 United Nations Plaza, New York, NY 10017. Quarterly; $15 institutions, $10 individuals.
"A forum for ongoing creative thinking about solutions to mankind's problems," combining points of view from systems theory, futurology, ethics, management, and the behavioral sciences.

FOCUS: TECHNICAL COOPERATION. Society for International Development, 1345 Connecticut Ave., NW, Washington, DC 20036. Quarterly; $20.
"Devoted to the theory and practice of those international activities known as 'technical assistance' and 'technical cooperation.'"

FOOD POLICY. IPC Science and Technology Press, Ltd., IPC House, 32 High St., Guildford GU1 3EW, Surrey, England. Quarterly; $65.
Articles, reports, and comments by experts with a broad perspective relevant to policy making for food and agriculture; helps to bridge gap between government, industry, and academia.

FOREIGN AFFAIRS. Council of Foreign Relations, Inc., 58 E. 69th St., New York, NY 10021. Subscriptions: 428 E. Preston St., Baltimore, MD 21202. Quarterly, f. 1922; $12.
Articles, often by leading participants in public affairs, including some aspects of science affairs. Each issue has brief annotation of recent books and lists of source materials, occasionally under such rubrics as atomic power, outer space, and research.

FUTURES: THE JOURNAL OF FORECASTING & PLANNING. Iliffe-NTP, Inc., 32 High St., Guildford, Surrey, England. IPC Science and Technology Press, 300 E. 42nd St., New York, NY 10017. Bimonthly; $52 institutions, $37 individuals.
International journal containing articles on the probable and possible long-term trends in science, technology, economics, politics, and social conditions, and on the means by which desirable goals may be selected and achieved. Includes news, summaries of conferences, and book reviews.

THE FUTURIST: A JOURNAL OF FORECASTS, TRENDS & IDEAS ABOUT THE FUTURE. World Future Society, PO Box 30369, Bethesda Station, Washington, DC 20014. Bimonthly, f. 1967; $12 includes membership (additional fee brings WFS Supplementary Program with monthly WFS Bulletin containing news items and book annotations).
Reports on future-oriented research and activities; includes excerpts from relevant talks and publications and brief book reviews.

HASTINGS CENTER REPORT. Institute on Society, Ethics and the Life Sciences, 360 Broadway, Hastings-on-Hudson, NY 10706. Bimonthly; $18 to associate members.
The institute also publishes an annual Bibliography, Special Reports on institute conferences, the annual Survey of study group findings, and the more comprehensive Hastings Center Studies.

HISTORY OF SCIENCE. Science History Publications, Ltd., Halfpenny Furze, Mill Lane, Chalfont St., Giles, Bucks, England. Quarterly, f. 1962; $40.
Contains reviews of literature and research.

HISTORY OF TECHNOLOGY. Imperial College, 3 Bloomsbury Pl., London WC1A 2QA, England. U.S.: ISBS, 10300 SW Allen Blvd., Beaverton, OR 97005. Annual, f. 1975; $24.
Concerned with technology as an essential feature of human society. Aims to investigate the technical problems of different cultures and periods, and the measures taken to solve them. Articles vary from detailed scientific analyses to more general discussions of the history of technology.

IAEA BULLETIN. International Atomic Energy Agency, Kärnter Ring 11, PO Box 590, A-1011 Vienna, Austria. Bimonthly; free from: Public Information Section, Divison of External Relations.
Devoted to the peaceful use of atomic energy; presents current technological innovations and ramifications as well as dealing with policy issues. Contains news items in connection with nuclear energy development and announcements of conferences, etc.

IEEE TRANSACTIONS. Institute of Electrical and Electronics Engineers, Inc., 345 E. 45th St., New York, NY 10017.

IEEE publishes several journals under the title IEEE Transactions; ____. These include: (1) Biomedical Engineering--bimonthly; $33; (2) Communications--quarterly; $48; (3) Computers--monthly; $48; (4) Engineering Management--quarterly; $24; and (5) Systems, Man and Cybernetics--bimonthly; $24.

IMPACT OF SCIENCE ON SOCIETY. UNIPUB, PO Box 433, Murray Hill Station, New York, NY 10016. Quarterly; $4.

Each issue is devoted to a single topic on the interaction of science and society. These have included: rational use of health resources, women in science, the parasciences, natural resources, and art and science.

INDUSTRIAL RESEARCH. Dun-Donnelly Publishing Corp., 666 Fifth Ave., New York, NY 10019. Monthly; $14.

Interpretive news and state-of-the-art reports on scientific and technological advances, applications, and trends of interest to researchers, engineers, and administrators. Both technical and social impact articles, including political aspects.

THE INTER DEPENDENT (formerly VISTA). 345 E. 46th St., New York, NY 10017. Monthly; $5, $4 students.

Presents UN news and issues which may be of specific interest in the U.S. Topics include: foreign aid, energy, food, trade, and disarmament.

INTERDISCIPLINARY SCIENCE REVIEWS (ISR). Heyden & Sons Ltd., Spectrum House, Alderton Crescent, London NW4 3XX, England. Quarterly, f. 1976; $44.

New journal "devoted to critical interdisciplinary reviews of the pure and applied, the social and the economic sciences." Its audience is basically science policy decision makers.

INTERNATIONAL AEROSPACE ABSTRACTS. Technical Information Service, American Institute of Aeronautics and Astronautics, Inc., 750 3rd Ave., New York, NY 10017. Semi-monthly, f. 1951; $400.

Most of the abstracts are highly technical. Other general articles relate to industrial applications and technology, defense aspects, law and related legal matters, and legislative hearings and documents.

INTERNATIONAL DEVELOPMENT REVIEW. Society for International Development, 1346 Connecticut Ave., NW, Washington, DC 20036. Quarterly, f. 1959; $10 membership/library.

Opinion and comment on problems of economic and social development by scholars and practitioners. News of the development profession and book and film reviews.

INTERNATIONAL JOURNAL OF GENERAL SYSTEMS. Gordon and Breach Science Publishers, 1 Park Ave., New York, NY 10016. Quarterly; $48 libraries, $21 individuals.

Deals with the "foundations of general systems theory and methodology; applications of the methodology in various branches of science, technology, humanities and the arts; general systems philosophy and education."

INTERNATIONAL JOURNAL OF MAN-MACHINE STUDIES. Academic Press, Inc., 111 5th Ave., New York, NY 10003. Quarterly, f. 1969; $49.

Deals with systems-engineering problems in the general area of man-machine interaction. The scope includes the man-machine problem, mathematical and engineering approaches to the study of man, and biological approaches to the development of machines. Contains editorials, articles, and book reviews.

INTERNATIONAL SOCIAL SCIENCE JOURNAL. UNESCO, 7 Place de Fontenoy, 75700 Paris, France. U.S.: UNIPUB, Box 433, Murray Hill Station, New York, NY 10016.

Each issue deals with a single topic, e.g., science policy, the social assessment of technology, sociology of science, and futurology.

INTERSCIENCIA. PO Box 19315, Washington, DC 20036. Monthly, f. 1976; $10 AAAS members, $20 institutions, $15 individuals.

An interdisciplinary journal of science and technology for development, containing articles pertaining to all countries of the western hemisphere, especially Latin America.

ISIS. History of Science Society. ISIS Business Office, Science History Publications, 156 5th Ave., New York, NY 10010. Quarterly, f. 1913; $21 institutions, $18 individuals, $9 students, including membership.

Devoted to the history of science and its cultural influences, including analyses of particular events or attitudes and original papers of scientists, both historical and contemporary. Separate annual critical bibliography. Periodically includes "A Guide to Graduate Study and Research in the History of Science, Technology and Medicine."

JOURNAL OF ENVIRONMENTAL HEALTH. National Environmental Health Association, 1600 Pennsylvania, Denver, CO 80203. Bimonthly; $10.

Principally aimed at professionals in environmental health; has news items and articles of opinion which are of interest to broader audience.

JOURNAL OF HEALTH POLITICS. Periodicals Department, Duke University Press, PO Box 6697, College Station, Durham, NC 27708. Quarterly; $36 institutions, $24 individuals, $12 students.

Deals with the initiation, formulation, and implementation of health policy. Provides a forum for all the important related disciplines: politics, law, sociology, economics, history, psychology, public administration, and ethics.

JOURNAL OF THE HISTORY OF BIOLOGY. D. Reidel Publishing Co., PO Box 17, Dordrecht, The Netherlands. Semiannual, f. 1968; $30.

Serves as a forum both for the working biologist and the historian of the biological sciences. Most of the articles develop in depth one problem related to a particular scientist. Includes essay reviews and annotated bibliography.

JOURNAL OF THE INTERNATIONAL SOCIETY FOR TECHNOLOGY ASSESSMENT. Science and Technology Publishers, North America, PO Box 4926 Cleveland Park Station, Washington, DC 20006. Quarterly; $30 with membership in ISTA, $40 non-members.
The official journal of ISTA, it provides a forum for social impact evaluation; a vehicle for papers of members and others concerned with technology assessment.

THE JOURNAL OF MEDICAL ETHICS. Society for the Study of Medical Ethics, Tavistock House East, Woburn Walk, London WC1H 9LG, England. f. 1975.
Provides a forum for the reasoned discussion of moral issues arising from the provision of medical care. Includes annotated bibliographies.

THE JOURNAL OF MEDICINE & PHILOSOPHY. The University of Chicago Press, 5801 Ellis Ave., Chicago, IL 60637. Quarterly, f. 1976; $15 individuals, $10 students and members of the Society for Health and Human Values.
Explores shared themes and concerns of philosophy and the medical sciences.

JOURNAL OF PEACE RESEARCH. International Peace Research Institute, Universitatsforlaget, University of Oslo, Box 307, Blindern, Oslo 3, Norway. Quarterly; $12.
Contains generally broad articles, including futurist questions.

JURIMETRICS JOURNAL (formerly M.U.L.L.). Section of Science and Technology of the American Bar Association, American Bar Center, 1155 E. 60th St., Chicago, IL 60637. Quarterly, f. 1959; $4/issue.
Articles, information, book reviews, and bibliographies concerning possible applications of electronic data processing equipment and related tools of logical analysis to the law.

LAW & COMPUTER TECHNOLOGY. World Peace Through Law Center, Section on Law and Computer Technology, Hill Building, 839 17th St., NW, Washington, DC 20006. Monthly, f. 1968; $20.
Deals with the ways in which information collection and retrieval through computer technology can be used to help create a "world law regime." Also includes a bibliography of relevant books and articles.

LAW & CONTEMPORARY PROBLEMS. Duke University School of Law, Duke Station, Durham, NC 27706. Quarterly, f. 1933; $16.
Symposia dealing with legal, economic, administrative, and other social science aspects of such subjects as atomic power development, legal medical problems, radio and television, river basin development, air pollution, and population control.

LEX ET SCIENTIA: The International Journal of Law & Science. The International Academy of Law and Science. Westminster Publications, Inc., 296 Northern Blvd., Great Neck, NY 11021. Quarterly, f. 1964; $12.
Forum for the interdisciplinary study of law and science. Legal rules of guidance relating to practical technology are examined in articles by scientists and lawyers. Topics such as regulation of atomic energy, pesticides, and social medicine are covered in world-wide surveys.

LONG RANGE PLANNING. Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, NY 10523. Bimonthly; $50.
Focuses the attention of senior managers, administrators, and academics on the concepts and techniques involved in the development of strategy and the generation of long-range plans.

MAN/SOCIETY/TECHNOLOGY. American Industrial Arts Association, Inc., NEA Headquarters Building, 1201 16th St., NW, Washington, DC 20036. 8x/yr.; $9 institutions.

MEDICAL WORLD NEWS. McGraw-Hill, Inc., 1221 Avenue of the Americas, New York, NY 10036. Weekly, f. 1960; $25.
Short, informal articles inform on current medical news in U.S. and abroad. Articles are both general and medical, dealing with issues in birth control, social medicine, the space program, etc.

MINERVA: A Review of Science, Learning, & Policy. Minerva, 50 St. Martin's Lane, London WC2N 4JS, England. Quarterly; $14.
Explores the conditions that foster the growth of scholarly and scientific knowledge, and the conditions that make this knowledge beneficial to society. Book reviews.

MOSAIC. National Science Foundation, Superintendent of Documents, USGPO, Washington, DC 20402. 6x/yr.; $8.55.
Source of information for the scientific and educational communities served by the NSF. Mainly topics in the research sciences with appeal to a variety of interests.

NATIONAL SCIENCE FOUNDATION ANNUAL REPORT. Superintendent of Documents, USGPO, Washington, DC 20402. Annual, f. 1950.
Detailed description of NSF activities and the director's statement in which signficant trends and important issues in science affairs are discussed.

NATIONAL SCIENCE FOUNDATION; REPORT OF NATIONAL SCIENCE BOARD OF THE NSF. Superintendent of Documents, USGPO, Washington, DC 20402. Annual.
Assessment by the National Science Board of the state of science and technology in the U.S.; recommendations for future development.

NATURAL HISTORY: Journal of the American Museum of Natural History. American Museum of Natural History, Central Park West at 79th St., New York, NY 10024. Subscriptions: Natural History, Membership Services, Box 6000, Des Moines, IA 50340. 10x/yr., f. 1900; $10.
Relevant articles include those on human ecology, conservation, and the quality of contemporary life.

NATURAL RESOURCES JOURNAL. University of New Mexico School of Law, 1117 Stanford NE, Albuquerque, NM 87131. Quarterly, f. 1961; $12.
Articles on natural resources technology from a legal-economic-sociological point of view. Articles on research are not too technical for the general reader.

NATURAL RESOURCES LAWYER. American Bar Association, Section of Natural Resources Law, 1155 E. 60th St., Chicago, IL 60037. Quarterly; $12.

NATURE. Macmillan (Journals) Ltd., Brunel Rd., Basingstoke, Hants RG21 2XS, England. Weekly, f. 1869; $118 institutions, $103 individuals, $95 surface mail.
The leading journal in England for reporting advances in all the natural sciences; similar to Science in a number of respects, including reports, regular comments, articles on science affairs and research developments, and a monthly books supplement.

NEW ENGLAND JOURNAL OF MEDICINE. Massachusetts Medical Society, 10 Shattuck St., Boston, MA 02115. Weekly, f. 1812; $22.
Both technical and general articles, including exploration of the social implications of medicine.

NEW SCIENTIST. New Science Publications, Ltd., 128 Long Acre, London WC2E 9QM, England. Weekly; $16.
Contains wide range of articles on such topics as industrial technology, basic science, and issues of science policy and education. Editorial notes, news, book reviews, and humorous comment.

NUCLEAR INDUSTRY: The Monthly Magazine of the Atomic Industrial Forum (formerly FORUM MEMO). Atomic Industrial Forum, Inc., 475 Park Ave., New York, NY 10016. Monthly; free with membership.
International news concerning atomic energy for peaceful uses. Political structures dealing with the atomic technology, government agencies, proceedings of the AEC and regulations, research, lists of publications in the field, and business news of industries involved in nuclear power.

NUCLEAR NEWS. American Nuclear Society, 244 E. Ogden Ave., Hinsdale, IL 60521. 15x/yr.; $45.
Articles, news, and comments on nuclear power industry, including governmental actions.

OECD OBSERVER. OECD Publications Center, Suite 1305, 1750 Pennsylvania Ave., NW, Washington, DC 20006. Bimonthly, f. 1962; $3.50.
Articles and reports cover a wide variety of topics on OECD activities and related interests, such as technology affairs, science policy, and research and development resources.

PERSPECTIVES IN BIOLOGY & MEDICINE. University of Chicago Press, 5801 Ellis Ave., Chicago, IL 60637. Quarterly, f. 1957; $16 institutions, $10 individuals.
Original essays, most of which are invited, include: new hypotheses, brief proposals of new research problems, interpretative essays which take stock of recent and current research and develop heuristic ideas not fully tested, and historical-biographical features. Occasional reprints of addresses and symposia.

PHILOSOPHY & PUBLIC AFFAIRS. Princeton University Press, Box 231, Princeton, NJ 08540. Quarterly; $15 institutions, $9.75 individuals, $6.50 students.
Discusses philosophical bases for social policy choices.

PHILOSOPHY OF SCIENCE. Philosophy of Science Association, 18 Morrill Hall, Department of Philosophy, Michigan State University, East Lansing, MI 48823. Quarterly; $17.50.

PHYSICS TODAY. American Institute of Physics, 335 E. 45th St., New York, NY 10017. Monthly, f. 1948; $24 non-members.
Technical articles on physics news and articles on science affairs. Regular features on research facilities and programs and on physics in government.

POLICY ANALYSIS. Published for the Graduate School of Public Policy, University of California, Berkeley, by University of California Press, 2223 Fulton St., Berkeley, CA 94720. Quarterly; $15 institutions, $12 individuals, $8 students.
Scholarly articles on application of policy analysis in a variety of areas, many involving substantial technological input.

POLICY SCIENCES; An International Journal Devoted to the Improvement of Policy Making. Elsevier Scientific Publishing Company, Box 211, Amsterdam, The Netherlands. Quarterly; $40 libraries, $18 individuals.
Includes case studies, ideological essays, and historical surveys. Decision theory and the behavioral sciences are often intermingled.

POLICY STUDIES JOURNAL. Policy Studies Organization, 361 Lincoln Hall, University of Illinois, Urbana, IL 61801. Quarterly; $15 libraries, $8 individuals, $5.50 students.
Aims at promoting the applications of political science to important policy problems.

PROBLEMS OF THE SCIENCE OF SCIENCE. Polish Academy of Sciences, Committee of the Science of Science. D. Reidel Publishing Co., 38 Papeterspad, Dordrecht, The Netherlands. Annual; $6.50.
Special English issue presenting papers in the science of science written by authors from socialist countries.

LE PROGRÈS SCIENTIFIQUE. La Délégation Générale à la Recherche Scientifique et Technique. La Documentation Francaise, Secrétariat Général du Gouvernement, Direction de la Documentation, 31, quai Voltaire, Paris 7e, France. Monthly; 40F.
Extensive articles in French offering authoritative overviews of science and technology affairs and policy making. Often includes extensive surveys of the situation in other countries.

THE PUBLIC INTEREST. National Affairs, Inc., 10 E. 53rd St., New York, NY 10022. Business office: The Public Interest, Box 542, Old Chelsea, New York, NY 10011. Quarterly; $9.50.
Essays by social scientists often close to national policy formulation. Distinguished publications committee.

PUBLIC POLICY. Published for the John Fitzgerald Kennedy School of Government at Harvard University by Harvard University Press, 79 Garden St., Cambridge, MA 02138. Quarterly; $20 institutions, $10 individuals.
Articles on social, political, and economic effects of policy decisions in particular instances.

LA RECHERCHE. 4, place de l'Odéon, 7500b Paris, France. Monthly; 120F.
Similar to Scientific American in content and format.

RESEARCH POLICY. Elsevier/North Holland, Journal Division, PO Box 211, Amsterdam, The Netherlands. Quarterly; $26.
Contains articles on program appraisal, research priorities, and technological forecasting.

RESOURCES. Resources for the Future, Inc., 1755 Massachusetts Ave., NW, Washington, DC 20036. 3x/yr., f. 1959; free.
Short reports on the development, conservation, and use of natural resources; pollution, power production, etc. Bibliography.

RESOURCES POLICY. IPC Science and Technology Press, Ltd., IPC House, 32 High St., Guildsford, Surrey GU1 3EW, England. Quarterly; $65.
Identifies, assesses, and relates the many issues affecting future non-renewable resource supply and demand, especially from the economics and planning viewpoints.

REVIEWS OF DATA ON SCIENCE RESOURCES. National Science Foundation, Superintendent of Documents, USGPO, Washington, DC 20402.

SATURDAY REVIEW. Saturday Review, Inc., 488 Madison Ave., New York, NY 10022. Weekly, science section f. 1956; $12.
Primarily a review of literature and the arts, with some emphasis on related social issues. Regular features include: "Research in America," "The Research Frontier," "Where is Science Taking Us?," and "Letters to the Science Editor." Topics have included: the control of drug prescriptions, weather modification, pollution control, and the social implications of space exploration.

SCIENCE. American Association for the Advancement of Science, 1515 Massachusetts Ave., NW, Washington, DC 20005. Weekly, f. 1955; $25 individuals, included with membership in the AAAS.
Articles, brief reports, and editorials attempt "to further the work of scientists to facilitate cooperation among them, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of methods of science in human progress."

SCIENCE & CULTURE. Indian Science News Association, 92 Acharya Prafullachandra Rd., Calcutta 9, India. Monthly, f. 1935; $15.
Stresses the progress of scientific studies in India, advocating methodical application of science to problems of national regeneration. Theoretical articles usually express a non-Western attitude toward science and society.

SCIENCE & PUBLIC POLICY (formerly SCIENCE POLICY). Journal of the Science Policy Foundation. IPC Business Press, Ltd., Oakfields House, Perrymount Rd., Haywards Heath, Sussex, England. Bimonthly; $65.
Covers a wide variety of international science policy issues, including implementation of science policy in different countries, data on research and development expenditures, summaries of publications of national science councils, and lecture and symposium texts. News, special reports, book reviews, and periodic bibliographies.

SCIENCE & SOCIETY: "An Independent Journal of Marxism." Science and Society, Inc., Room 4331, John Jay College, City University of New York, 445 W. 59th St., New York, NY 10019. Quarterly; $11 institutions, $8 individuals.
Articles and book reviews in terms of Marxist theory; little on science in the conventional sense.

SCIENCE & TECHNOLOGY (formerly INTERNATIONAL SCIENCE & TECHNOLOGY). International Communications, Inc., 114 Manhattan St., Stamford, CT 06904. Monthly; $15.
State-of-the-art articles on interdisciplinary subjects in technology and science affairs. Intended audience is "scientists and engineers who are technical managers."

SCIENCE DIMENSION (formerly NRC RESEARCH NEWS). National Research Council of Canada, Public Information Branch, Ottawa, Ontario K1A 0R6, Canada. Bimonthly, f. 1969; free to educational and scientific institutions and libraries.
Information on current NRC activities, including laboratory research and support to universities and industries, and general articles with a futures orientation.

SCIENCE FOR THE PEOPLE. Scientists and Engineers for Social and Political Action, 16 Union Sq., Somerville, MA 02143. Bimonthly; $15 institutional, $12 with membership in SESPA.
Articles, reviews, and commentary from an activist, anti-establishment viewpoint.

SCIENCE FORUM: A Canadian Journal of Science & Technology. University of Toronto Press, Front Campus, Toronto M5S 1A6, Ontario, Canada. Bimonthly; $10.
For both scientists and non-scientists, articles deal with recent advances in science and technology and their implications for public policy. Many articles focus on Canadian science policy formation.

SCIENCE PROGRESS. Blackwell Scientific Publications Ltd., Osney Mead, Oxford OX2 0EL, England. Quarterly; $42.
Mostly methodological and technical articles, with an occasional article on the philosophy of science. Reviews of a field of research have a general orientation. Extensive book reviews.

SCIENCE REVIEW. National Science and Development Board, 25th and Boston Sts., Port Ares, Manila, Philippines. Monthly, f. 1960; free.
Opinion and news on science, education, and public policy. Non-technical articles dealing with the relation of science to society and government, especially in the Philippines.

THE SCIENCES. New York Academy of Sciences, 2 E. 63rd St., New York, NY 10021. Bimonthly; $5.
Popular articles on science, particularly in the context of its social utilization.

SCIENTIFIC AMERICAN. Scientific American, Inc., 415 Madison Ave., New York, NY 10017. Monthly, f. 1948; $15.
Articles on current major research written by scientists for the layman. A section on "Science and the Citizen" digests current events, and the first article in each issue discusses some general problem of the social effects of science. Book reviews and historical items.

SCIENTIFIC, ENGINEERING, TECHNICAL MANPOWER COMMENTS. Scientific Manpower Commission, 1776 Massachusetts Ave., NW, Washington, DC 20036. Monthly, f. 1964; $15.
Concerns news affecting the recruitment, training, and utilization of scientific, engineering, and technical manpower. Presents a summary of current developments in science related government and educational activities. Includes legislative information concerning the national employment market.

SMITHSONIAN. Smithsonian Institution, 900 Jefferson Dr., Washington, DC 20560. Subscriptions: PO Box 5300, Greenwich, CT 06830. Monthly; $10.
Oriented toward general cultural interests; some articles deal with scientific discovery or prediction.

SOCIAL BIOLOGY. Society for the Study of Social Biology, 1180 Observatory Dr., Room 5440, Madison, WI 53706. Quarterly; $16 members, $25 non-members.
Technical level articles on biological and social interaction. Concerns areas such as eugenics, food distribution, and population control.

SOCIAL STUDIES OF SCIENCE; An International Review of Research in the Social Dimensions of Science and Technology. Sage Publications, 275 S. Beverly Dr., Beverly Hills, CA 90212. Quarterly; $22 institutions, $14 individuals.
Reports research on the social and historical dimensions of science and technology.

SOCIETY (formerly TRANSACTION: SOCIAL SCIENCE & MODERN SOCIETY). Society, Box A, Rutgers University, New Brunswick, NJ 08903. Bimonthly; $12 institutions, $9.75 individuals.
Articles, commentary, news, reviews from social science perspective at level of general informed reader. Only tangentially concerned with science and technology.

SURVIVAL. The International Institute for Strategic Studies. 18 Adam St., London WC2N 6AL, England. U.S.: British Publications, 30 E. 60th St., New York, NY 10022. Bimonthly, f. 1959; $8.
Reprints of important articles and official documents about defense strategy in the nuclear age; books reviews, autobiographies, and periodic estimates of the military strengths of various nations.

SYNTHESIS; The University Journal in the History and Philosophy of Science. 838 Holyoke Center, Cambridge, MA 02138. Quarterly; $12 institutions, $8 individuals, $4 students.
Includes articles and book reviews. Published by university undergraduates.

TECHNOLOGICAL FORECASTING & SOCIAL CHANGE. American Elsevier Publishing Co., Ltd., 52 Vanderbilt Ave., New York, NY 10017. 4 issues/vol., 1-2 vols./yr.; $28/vol. institutions, $15/vol. individuals.
"An international journal devoted to the methodology of exploratory and normative forecasting to encourage applications to dynamic integrative planning." Book reviews.

TECHNOLOGY & CULTURE. Society for the History of Technology, University of Chicago Press, 5801 Ellis Ave., Chicago, IL 60637. Quarterly, f. 1959; $20 institutions, $15 individuals, $12 students.
Articles on the history of technical devices and processes and on the development of technology and its relation to society and culture. Book reviews, and an annual "Current Bibliography on the History of Technology."

TECHNOLOGY REVIEW. Alumni Association of the Massachusetts Institute of Technology, Room E19-430, Cambridge, MA 02139. 8x/yr., f. 1899; $15.
Discusses technological developments of major impact on society; topical discussions, capsule reports on new developments, science and government reviews.

THE TEILHARD REVIEW. The Teilhard Centre for the Future of Man, 3 Cromwell Pl., London SW7 2JE, England. 3x/yr.
Has included articles on the impact of technology on social structure and the structure of global survival.

TRANSPORTATION PLANNING & TECHNOLOGY. Gordon and Breach Science Publishers, Inc., One Park Ave., New York, NY 10016. Quarterly; $65 libraries.
Emphasis on work relating to the interface between transportation planning and technology, economics, land use planning, and governmental policy. Book reviews and short news items.

TRANSPORTATION USA. U.S. Department of Transportation, Office of Public Affairs S-81, Washington, DC 20590. Quarterly; $3.10.
DOT's public relations magazine. Presents a comprehensive coverage of the status of transportation, technologies, projects, innovative concepts, and government policies.

URBAN AFFAIRS QUARTERLY. Sage Publications, 275 S. Beverly Dr., Beverly Hills, CA 90212. Quarterly; $20 institutions, $12 individuals.
Presents a broad spectrum of urban issues.

WAR/PEACE REPORT. Published by the Center for War/Peace Studies of the New Friends Group. Gordon and Breach, One Park Ave., New York, NY 10016. 10x/yr.; $9.50 institutions.
Fact and opinion on progress toward a world of peace with justice.

WORLD DEVELOPMENT. World Development Ltd., Headington Hill Hall, Oxford OX3 0BJ, England. Monthly; $62.
"The multidisciplinary international journal devoted to the study and promotion of world development."

YEARBOOK OF SCIENCE & THE FUTURE. Encyclopedia Britannica, Inc., 425 N. Michigan Ave., Chicago, IL 60611. Annual, f. 1968; $12.50.
Written specifically for the layman in order to "describe the social and technological aspects of all activities relating to the scientific enterprise." Most attention to current topical issues and futurology. Includes a review of the science year that summarizes significant progress made in all areas of science and technology.

ZYGON: JOURNAL OF RELIGION & SCIENCE. Joint Publication Board of the Institute on Religion in an Age of Science and Meadville Theological School of Lombard College. University of Chicago Press, 5750 Ellis Ave., Chicago, IL 60637. Quarterly, f. 1966; $12 institutions, $9 individuals.
Forum for essays seeking to interpret or reformulate religion in the light of the sciences; critical commentary, symposia papers, book reviews, and critical bibliographies.

C. NEWSLETTERS AND BULLETINS: A SELECTED LIST

AIR & WATER NEWS. McGraw-Hill Publications, 330 W. 42nd St., New York, NY 10036. Weekly, f. 1967.
This newsletter reports on environmental problems, policies, and legislation from the local to the international level. Emphasis is on U.S. industrial and government efforts at fighting pollution.

ARMS CONTROL TODAY. The Arms Control Association, 11 Dupont Circle, NW, Washington, DC 20036. Monthly; $15 U.S., $20 foreign.
Features guest editorials, Who's Doing What, and Arms Control in Print.

BIOETHICS EXCHANGE. University of California Medical Center, San Francisco, CA 94143. Quarterly; free.
A newsletter for teachers of bioethics at the college and professional school level.

CENTER FOR SCIENCE IN THE PUBLIC INTEREST NEWSLETTER. 1779 Church St., NW, Washington, DC 20036. Quarterly.

COMMITTEE ON SOCIAL IMPLICATIONS OF TECHNOLOGY OF THE IEEE NEWSLETTER. Victor Klig, ed. Institute of Electrical and Electronics Engineers, Inc., 345 E. 45th St., New York, NY 10017. Monthly.

COMMON CAUSE: REPORT FROM WASHINGTON. 2030 M St., NW, Washington, DC 20036. 10x/yr.
Citizens' lobbying organization reports on progress of programs in a variety of areas: environment, military spending, welfare, tax programs, etc.

COMMUNICATIONS TOMORROW. Special Studies Division, World Future Society, 4916 S. Elmo Ave., Washington, DC 20014. 6x/yr.; $6 members, $9 non-members.
Reports trends, forecasts, and innovations in telecommunications, computers, media, information retrieval, etc.

ENERGY REPORTER. Citizen newsletter of the Federal Energy Administration, Washington, DC 20461. Monthly, f. 1975; free.
Provides a monthly outline of a particular issue in the energy field and strives for a balanced presentation. Also provides information on recent publications and films on energy.

ENVIRONMENTAL ACTION. 1346 Connecticut Ave., NW, Room 731, Washington, DC 20036. Biweekly.
Reports on U.S. environmental policy.

ENVIRONMENTAL HISTORY NEWSLETTER. John Opie, ed. Department of History, Duquesne University, Pittsburgh, PA 15219. $2.
Contains brief articles and bibliographical information.

FAS PUBLIC INTEREST REPORT (formerly FAS NEWSLETTER). Federation of American Scientists, 203 C St., NE, Washington, DC 20002. Monthly, f. 1946; $20 with membership in FAS.
Contains news items and short articles discussing the effects of science on national and world affairs.

FDA CONSUMER. Food and Drug Administration, USGPO, Washington, DC 20402.

FOOTNOTES TO THE FUTURE. Futuremics, Inc., 2850 Connecticut Ave., NW, Washington, DC 20008. Monthly; $15.
Includes abstracts of books and articles.

FOSMOS BULLETIN. Foundation for Studies of Modern Science, Inc., 2 Washington Square Village, Suite 11B, New York, NY 10012. Quarterly, f. 1969.
Published by an interdisciplinary group established to sponsor and conduct investigations of problems of contemporary science for the solution of which present theory appears inadequate, to promote scientific communication, and to develop the science of science. Reports on foundation activities and recent developments of interest.

FUTURES CONDITIONAL. Robert Theobald, ed., Box 1531, Wickenburg, AZ 85358. Monthly, f. 1973; $24.
A "forum for new perceptions, new programs of action."

HARVARD UNIVERSITY PROGRAM ON PUBLIC CONCEPTIONS OF SCIENCE NEWSLETTER (beginning October 1976, to be called NEWSLETTER ON SCIENCE, TECHNOLOGY, AND HUMAN VALUES). Aiken Computation Laboratory-231, Harvard University, Cambridge, MA 02138. Quarterly, f. 1972; $6.
An excellent general resource; includes ongoing annotated, general bibliography, additional commissioned bibliographies in special areas, contributed articles, news items, communications on university activities, foundation programs, federal agency programs, etc. Back issues available free while supply lasts.

HISTORY OF SCIENCE SOCIETY NEWSLETTER. c/o Professor Roger H. Stuewer, School of Physics and Astronomy, University of Minnesota, Minneapolis, MN 55455. Quarterly; free to HSS members, $5 nonmembers.
Includes news of HSS activities, announcements of meetings, workshops, publications, and jobs.

ICSU BULLETIN. International Council of Scientific Unions, Secretariat, 7, Via Cornello Celso, 00161, Rome, Italy. f. 1964.
News from member unions and committees, reports from ICSU representatives, and a calendar of future meetings. Occasional abstracts of articles and addresses on science affairs.

INPUT PROJECT NEWS. 102 Materials Research Laboratory, The Pennsylvania State University, University Park, PA 16802.
The occasional newsletter of the Increasing Public Understanding of Technology Project. The focus is on technology and society.

INTERNATIONAL ENERGY POLICY PERSPECTIVES. Forecasting International, Ltd., 1001 North Highland St., Penthouse, Arlington, VA 22201. Monthly, f. 1966; $85.
Consolidates the burgeoning amount of energy information and commentary. In response to specific request, an IEPP subscription includes access to the editor's files of background reports.

INTERNATIONAL SCIENCE NOTES. Bureau of Oceans and International Environmental and Scientific Affairs, Department of State, Washington, DC 20520. Monthly; free.
Covers various areas having to do with science and technology. Previous issues have included "A World Science Conference for Third World Development" and "A Review of Science and Technology in Israel and Its Relation to the U.S."

ITEST. The Newsletter of the International Secretariat for Science-Theology Dialogue. Inquiries to: Robert A. Brungs, S.J., Institute for Theological Encounter with Science and Techology, 221 N. Grand Blvd., St. Louis, MO 63103. Quarterly.

NAS-NRC-NAE NEWS REPORT. 2101 Constitution Ave., Washington, DC 20418. 10x/yr., present format f. 1965.
Published jointly by the National Academy of Sciences, the National Research Council, and the National Academy of Engineering to report on recent research and public science issues. Includes listing of new publications by these organizations.

NATURAL RESOURCES, SCIENCE & TECHNOLOGY NEWSLETTER. Economic Commission for Africa, United Nations, New York, NY 10017. Irregular.
Contents include news reports concerning activities of international organizations in the field of science and technology and the development of natural resources on the African continent.

NEWS FROM THE KENNEDY INSTITUTE. Joseph and Rose Kennedy Institute for the Study of Human Reproduction and Bioethics, Georgetown University, Washington, DC 20007. Quarterly; free.

NEWSLETTER: Center for History & Philosophy of Physics. American Institute of Physics, 335 E. 45th St., New York, NY 10017. Quarterly, f. 1964; free.
Information about acquisitions, research, publications, meetings, and other activities significant to the history and philosophy of physics.

NEWSLETTER, Committee on Philosophy and Medicine of the American Philosophical Association. Committee chairperson: John Ladd, Department of Philosophy, Brown University, Providence, RI 02912. $2.
Provides a clearinghouse for exchange of ideas and information about activities, teaching, and research in the areas where philosophy and medicine intersect.

NEWSLETTER OF THE AMERICAN SCIENTIFIC AFFILIATION. 5 Douglas Ave., Elgin, IL 60120. Bimonthly; free with membership in ASA.
Concerned mainly with science and Christianity. Includes reports on various activities of individual members and organized sections, information on job opportunities, and other items of ASA import.

NEWSLETTER OF THE NATIONAL ASSOCIATION OF SCIENCE WRITERS, INC. PO Box H, Sea Cliff, NY 11579. Quarterly, f. 1952.
Reports on items of interest to members (600) of the NASW, a professional group formed in 1934 to "foster the dissemination of accurate information regarding science." Includes coverage of science meetings from the science writer's point of view, opinion on the role and responsibility of the science writer, and news of the activities of the auxiliary Council for the Advancement of Science Writing. Contains reviews of selected books, letters, and other commentary. NASW also publishes a "Clipsheet," which reprints newspaper stories written by members.

NEWSLETTER OF THE SOCIETY FOR SOCIAL STUDIES OF SCIENCE. c/o SASS, Department of Sociology, 323 Uris Hall, Cornell University, Ithaca, NY 14853. Included with membership dues in SSSS--$10, $5 students.
News of "4S" activities; announcements of projects, programs, conferences, and publications.

NOT MAN APART. Tom Turner, ed. Friends of the Earth, 529 Commercial, San Francisco, CA 94111. Semi-monthly; $10.
Stresses environmentalist concerns and viewpoints, including much information on the legislative situation of environmental interest bills.

OCEAN SCIENCE NEWS. Nautilus Press, Inc., 747 National Press Building, Washington, DC 20004. Weekly, f. 1958.
Reports on the use and exploration of the seas, covering government policy, company activities, scientific research, international law, and marine societies. Brief, factual notes on the "world ocean market."

PEOPLE & ENERGY. Center for Science in the Public Interest, 1779 Church St., NW, Washington, DC 20036. Monthly; $7.50 individuals, $35 institutions.
Concerned mainly with environmental and energy issues.

PHILOSOPHY & TECHNOLOGY NEWSLETTER. Paul T. Durbin, ed. Philosophy Department, University of Delaware, Newark, DE 19711. Quarterly.
An "invisible college" for philosophy of technology, bibliographic materials, clearinghouse for sharing of information regarding programs, courses, grant applications, individual research projects, etc.

PHILOSOPHY OF SCIENCE ASSOCIATION NEWSLETTER. Peter D. Asquith, ed. 18 Morrill Hall, Philosophy Department, Michigan State University, East Lansing, MI 48824. Quarterly; distributed to all PSA members, Newsletter contributors, exchanges with other newsletters, and other individuals and organizations PSA wishes to have informed of its activities.

Philosophical aspects/implications of public affairs, ethics of technological implication, sociobiology, decision theory, and standard issues in philosophy of science. Includes notices of events.

PHYSICS & SOCIETY, Newsletter of the Forum on Physics and Society. Martin L. Perl, ed. 335 E. 45th St., New York, NY 10017. Quarterly; free to members of the forum and to physics libraries upon request.

Letters, short articles, and forum news items.

POPULATION BULLETIN. Population Reference Bureau, Inc., 1775 Massachusetts Ave., NW, Washington, DC 20036. 6x/yr., f. 1945.

Each issue provides information and interprets facts on some aspect of population change and relates them to world affairs.

PUBLIC AFFAIRS REPORT. Institute of Governmental Studies, 109 Bernard Moses Hall, University of California, Berkeley, CA 94720. 6x/yr.

Purpose is to contribute to informal discussion of public affairs by presenting relevant and accurate background information. Each issue is based upon a recent research or long-term specialization of the author.

PUBLIC SCIENCE NEWSLETTER (formerly SPPSG NEWSLETTER). Science and Public Policy Studies Group, MIT. MIT Press, Room E53-450, Cambridge, MA 02139. Monthly. (Publication suspended in October 1974.)

Information on new programs, job opportunities, fellowships and grants, government announcements and publications, conferences, and other publications.

PUBLIC TECHNOLOGY, INC. NEWS (PTI/NEWS). Public Technology, Inc., 1140 Connecticut Ave., NW, Washington, DC 20036. Bimonthly.

Reviews technology innovations tried and exchanged among 27 cities and counties nationwide, each of which has employed technology agents to improve the quality of public services. Also available: publications regarding the organization of public/municipal projects, e.g., "Using Construction Management for Public and Institutional Facilities," "Energy Conservation Package," etc.

PUGWASH NEWSLETTER. 9 Great Russell Mansions, 60 Great Russell St., London WC1, England. Quarterly.

Continuing committee of the Pugwash Conference on Science and World Affairs.

SCIENCE & GOVERNMENT REPORT, "The Independent Bulletin of Science Policy." Kalorama Station, Box 21123, Washington, DC 20009. 22x/yr.

SCIENCE NEWS (formerly SCIENCE NEWS LETTER). Kendrick Frazier, ed. Science Service, Inc., 1719 N St., NW, Washington, DC 20036. Subscriptions: 231 West Center St., Marion, OH 43302. Weekly, f. 1922; $10.
Short, popular summaries of current scientific and technical developments and science affairs for scientists, engineers, interested laymen, teachers, and students. Science Service is a non-profit institution for the popularization of science.

SOCIETY FOR SOCIAL RESPONSIBILITY IN SCIENCE NEWSLETTER. Society for Social Responsibility in Science, 86 Lenox Hill Station, New York, NY 10021. 5x/yr., f. 1949.
Reports, letters, and news items of special interest to members of the society. SSRS aims to "foster throughout the world a tradition of personal moral responsibility for the consequences to humanity of professional activity with emphasis on constructive alternatives to militarism."

SPARK. Committee for Social Responsibility in Engineering, 475 Riverside Dr., New York, NY 10027. Quarterly; $.75/issue.
Seeks to challenge the present orientation of engineering and to explore ways in which engineering skills can be used to solve the obvious and growing ills of our society.

STPP NEWS. Department of Political Science, Purdue University, West Lafayette, IN 47907. Monthly; free.
Aims to promote communication, cooperation, and an exchange of ideas among a larger interdisciplinary community of scholars, researchers, and educators involved with the relations of science and technology to society. In addition to articles, provides an extensive list of references to recent articles in the periodical literature relevant to this area.

TA UPDATE; The Newsletter of the International Society for Technology Assessment. Box 4926, Cleveland Park Station, Washington, DC 20008. 6x/yr.; membership includes journal and newsletter, $28; non-member, $10.

TECHNOLOGY & SOCIETY DIVISION OF THE ASME NEWSLETTER. Victor Paschkis, ed. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017. Quarterly.

UNFPA NEWSLETTER. United Nations Fund for Population Activities, 485 Lexington Ave., New York, NY 10017. Monthly.

WASHINGTON SCIENCE TRENDS. Trends Publishing, Inc., National Press Building, Washington, DC 20004. Weekly.
News of U.S. government scientific activities: patents awarded, research developments, science policy decisions, standards set, new federal programs and conferences, and other related science affairs. Includes annotated bibliography of selected new government and university publications.

WEEKLY GOVERNMENT ABSTRACTS. National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161. Request NTIS-PR-205/PCW. Weekly.

Covers and summarizes recent government-conducted or sponsored research activities and findings in 25 areas of industrial, technological, and sociological interest.

WORLD FUTURE SOCIETY BULLETIN. World Future Society, PO Box 19285, Twentieth St. Station, Washington, DC 20036. Monthly, f. 1968.

This supplement to The Futurist gives notice of upcoming meetings, new articles and books, letters, announcements of contracts awarded, jobs open, and other items of interest to members. Articles and bibliographies sent with Bulletin.

D. RECENT BIBLIOGRAPHIES: A SELECTED LIST

Advanced Technology and Science Studies Group. Georgia Institute of Technology. *Technological Innovation: A Critical Review of Current Knowledge*. Vol. IV: Selected Literature Abstracts. 1975. Prepared for the National Science Foundation and the U.S. Department of Commerce. National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161.

Prepared as part of a study on the process of technological innovation. The volume contains a healthy assortment of books and journal articles which are abstracted under the following headings: bibliographic data, scope (or topic), methodology, assumptions, hypotheses, empirical findings, previous work, and conclusions.

American Association for the Advancement of Science. Commission on Science Education. *Science for Society: A Bibliography*. Annual; 6 editions, 1st edition: 1970. AAAS, 1776 Massachusetts Ave., Washington, DC 20036.

Annual, non-subscription compilation with annotations on items in 6 broad categories: Reference; Science, Technology, and Society; Resources and the Environment; Education; Health; and Conflict and Population. Each edition has 3000-4000 entries, most of which are not duplicated in subsequent editions.

Arms Control Association. *Arms Control, Disarmament, and National Security: A Quarterly Annotated Bibliography*. First issue published December 1973-February 1974, 690 entries, 66pp.; subsequent issues temporarily delayed. $2.50 members, $3.50 nonmembers. The Arms Control Association, 11 Dupont Circle, NW, Washington, DC 20036.

Battelle Memorial Institute. *Science Policy Reviews Quarterly*. 1967-72; ceased publication. Battelle Memorial Institute, 505 King Ave., Columbus, OH 43201.

A journal which stimulated new interest in and documentation of the broad range of thought on matters involving the interactions of public policy with science and technology. The journal contains feature articles and annotated references. The latter grew to 3373 citations and serves as a most useful bibliographic reference.

Butterworth and Co., Ltd. *Three Thousand Abstracts Resulting from the 1972-1973 Experimental Indexing of Literature in the Area of Science and Technology Policies*. Butterworth and Co., Ltd., 88 Kingsway, London WC2B 2AB, England.

Caldwell, Lynton K., ed. *Science, Technology, and Public Policy: A Selected and Annotated Bibliography*. Prepared for the National Science Foundation by the Program of Advanced Studies in Science, Technology, and Public Policy, Indiana University, Bloomington, IN 47401.
Three volumes: Vol. I, books, monographs, government documents, and whole issues of journals, 1968; Vol. II, articles in journals, 1969; Vol. III, books, monographs, documents, and articles in journals, 1968-1970.

Center for Bioethics. *New Titles in Bioethics*. Monthly, from the center's Bioethics Library; $6/yr. Center for Bioethics, Kennedy Institute, Georgetown University, Washington, DC 20057.

Cetron, Marvin J., Clayton, Audrey, and Gardner, Sue. *State of the Art and Bibliography of Available Forecasting*. $50. Science and Technology Publishers, Box 4926, Cleveland Park Station, Washington, DC 20006.
Over 1400 references covering a wide spectrum of technological forecasts in the fields of communication and information, computers and automation, construction and building, electronics, energy, environment, food and agriculture, machines, manufacturing and tools, materials and mineral resources, medicine, health and pharmaceuticals, and transportation.

Clouser, K. Danner, and Zucker, Arthur. *Abortion and Euthanasia: An Annotated Bibliography*. Society for Health and Human Values, 732 Witherspoon Building, Philadelphia, PA 19107.

Council of Scientific and Industrial Research. *Current Literature on Science of Science* (formerly *Index to Literature on Science of Science*). Monthly; $15/yr. Council of Scientific and Industrial Research, Hillside Rd., New Delhi 110012, India.
Provides short abstracts of papers on topics relating to the application of science and technology to development. It is a medium for disseminating information to scientists, technologists, industrialists, policy makers, planners, etc. on recent developments in the field of science on science.

Davenport, William H. "Resource Letter TLA-1: Technology, Literature, and Art Since World War II," *American Journal of Physics*, Vol. 38 (1970), p. 407.
"Resource Letter TLA-2: Technology, Literature, and the Arts, Contemporary," *American Journal of Physics*, Vol. 43 (1975), p. 4.
These are annotated bibliographies. Reprints are available for $.50 with stamped, self-addressed envelope, from: Executive Officer, American Association of Physics Teachers, Drawer AW, Stony Brook, NY 11790.

Ferguson, Eugene S., comp. *Bibliography of the History of Technology*. Cambridge, MA: MIT Press, 1968.

Havelock, Ronald G., ed. *Knowledge Utilization and Dissemination: A Bibliography*. 1968; revised 1972. 217pp. The Center for Research on Utilization of Scientific Knowledge, University of Michigan, Ann Arbor, MI 48104.

Alphabetical listing of 4000 entries relevant to the communication and adoption of innovations, planned change, dissemination, scientific knowledge transfer, and utilization.

Institute on Science and Man. *A Selected Bibliography on a Multidisciplinary Approach to Environmental Impact Analysis*. $2. Institute on Science and Man, Rensselaerville, NY 12147.

Irwin, Lynne. *Transportation for Developing Countries--An Annotated Bibliography*. $5. Program on Policies for Science and Technology in Developing Nations, 180 Uris Hall, Cornell University, Ithaca, NY 14853.

Knezo, Genevieve T. *Science, Technology, and American Diplomacy--A Selected, Annotated Bibliography of Articles, Books, Documents, Periodicals, and Reference Guides*. Selected references for 1965-69. Prepared for the Sub-committee on National Security and Scientific Developments of the Committee on Foreign Affairs, U.S. House of Representatives, by the Science Policy Research and Foreign Affairs Divisions, Legislative Reference Service, U.S. Library of Congress. Washington, DC: USGPO, March 1970.

Knezo, Genevieve T. "Science, Technology, and Diplomacy: A Selected, Annotated Bibliography by Subject," in *Science, Technology, and Diplomacy in the Age of Interdependence*. Prepared for the Subcommittee in International Security and Scientific Affairs of the Committee of International Relations, U.S. House of Representatives. Washington, DC: USGPO, June 1976.

Lehigh University Humanities Perspectives on Technology Program. *Humanistic Perspectives on the City: A Selected Bibliography*. 1973. Lehigh University, Bethlehem, PA 18015.

Lehigh University Humanities Perspectives on Technology Program. *Humanistic Perspectives on the Computer: A Selected Bibliography*. 1974. Lehigh University, Bethlehem, PA 18015.

Livingston, Dennis. *Bibliography of Positive Alternative Futures*. Free, but $1 donation is requested to cover duplication and mailing costs. Department of History and Political Science, Rensselaer Polytechnic Institute, Troy, NY 13181.

Massachusetts Institute of Technology Center for Policy Alternatives. *Bibliography for the Study of UK Science and Technology Policy with Special Reference to Economic and Industrial Development*. Part I: 1959-73. Massachusetts Institute of Technology, Cambridge, MA 02139.

Mitcham, Carl, and Mackey, Robert, comps. *Bibliography of the Philosophy of Technology*. Chicago: University of Chicago Press, 1973.

Moravcsik, Michael J. *Science Development, The Building of Science in Less Developed Countries*. ISBN 0-89249-008-X. May 1975, 250pp., $10. Publications Department, The Program of Advanced Studies in Institution Building and Technical Assistance Methodology (PASITAM), 1005 E. 10th St., Bloomington, IN 47401.
Includes an examination of the literature in the area of science development. Contains a list of 500 publications in several areas of science development.

Morrison, Denton E., with Virginia Bemis, et al. *Energy: A Bibliography of Social Science and Related Literature*. New York: Garland Publishing, Inc., 1975. 174pp., $17 library binding.

National Council on Scientific Policy. *Analytical Journal of Works on Scientific Policy*. Quarterly. Numbers 1-6 compiled for the OECD by the National Council on Scientific Policy; numbers 7-8 edited by the National Council on Scientific Policy, 8 rue de la Science, Brussels 4, Belgium. 1964-68.
A series in 8 parts which abstracts books and articles on scientific policy. Works originally written in French are summarized in English; works in English are summarized in French.

National Library of Medicine. History of Medicine Division. *Bibliography of the History of Medicine*. Number 811972. USGPO, Washington, DC 20402.

Nicolson, Marjorie. "Resource Letter SL-1: Science and Literature," *American Journal of Physics*, Vol. 33 (1965), p. 175.
Includes an annotated bibliography. Reprints are available for $.50 with stamped, self-addressed envelope, from: Executive Officer, American Association of Physics Teachers, Drawer AW, Stony Brook, NY 11790.

Peck, Theodore P., and Kumar, K.S.P., eds. *Impact of Technology on Society: A Selective Bibliography*. December 1973. University of Minnesota, Institute of Technology, Minneapolis, MN 55455.

Program on Policies for Science and Technology in Developing Nations. *Science and Technology for International Development: A Selected List of Information Sources in the United States and Bibliography of Selected Materials*. February 1975. $5. Cornell University, Ithaca, NY 14853.

Rand Corporation. Bibliographies of selected Rand publications in various subject areas. Free. Rand Corporation, 1700 Main St., Santa Monica, CA 90406.
Topics include energy, health, policy sciences, transportation.

Rand Corporation. *The Problem of Privacy in the Computer Age: An Annotated Bibliography*. Vols. I and II: December 1967 and December 1969. Rand Corporation, 1700 Main St., Santa Monica, CA 90406.

Sollitto, Sharmon, and Veatch, Robert M. *Bibliography of Society, Ethics and the Life Sciences*. Annual. Institute of Society, Ethics and the Life Sciences, 632 Warburton Ave., Hastings-on-Hudson, NY 10706.

Spencer, Charles, and Schroeer, Dietrich. "Critical Reading List for Teachers of Physics-and-Society Courses," *American Journal of Physics*, Vol. 44 (1976), p. 139.
A critical bibliography of 25 books is presented. It is to aid potential teachers of physics-and-society courses in acquiring competence in this subject area.

Spiegel-Rösing, I.S. *Introduction to and Material for Science Studies.* 1973. Wissenschaftsentwicklung und Wissenschaftssteuerung, Athenäum Verlag, Frankfurt.
Includes bibliographies in the following areas: general, historical development, science as a social institution, the scientist, information and communication, organization and management of science, science policy and developing countries, research planning and priority setting, technology and law, criticisms of science. It has an author index for cross-reference.

Steele, R.D. *Multinational Corporations, Technology Transfer, and the Developing Countries: An Introductory Bibliography*. 1975, 39pp., $4. International Studies Program, Center for Social Research, Lehigh University, Bethlehem, PA 18015.

Stockdale, Jerry D., and Aronson, Steven, comps. *Technology and Societal Change: Selected Sources with Emphasis on Resource Allocation*. October 1970. Mimeo (limited supply), 17pp. Cornell University Department of Rural Sociology, Ithaca, NY 14853.

Sumek, Lyle. *Environmental Management and Politics: A Selected Bibliography*. 1973, 74pp., $1.50. Center for Governmental Studies, Northern Illinois University, DeKalb, IL 60115.

U.S. Atomic Energy Commission. Division of Headquarters Services. Library Branch. *Science and Society: A Bibliography*. Compiled by Hugh E. Voress. Washington, DC: USGPO, 1971.

U.S. Congress. Senate. Committee on Rules and Administration. Subcommittee on Computer Services. *Technology Assessment for the Congress*. Staff study. Washington, DC: USGPO, 1972.

U.S. Department of Health, Education, and Welfare. *Ethical Issues in Health Services, A Report and Annotated Bibliography, Supplement I, 1970-1973*. Supplement I: Medical Ethics. Edited by James Carmody. DHEW Pub. No. HRA-74-3123. USDHEW, Public Health Service, Health Resources Administration, 5600 Fishers La., Rockville, MD 20852.

U.S. Environmental Protection Agency. Office of Research and Monitoring. *Environment: A Bibliography of Social Science and Related Literature*. Washington, DC: USGPO, 1973.

U.S. Library of Congress. Legislative Reference Service. Technology Assessment: Annotated Bibliography and Inventory of Congressional Organization for Science and Technology. Washington, DC USGPO, 1970.

U.S. Library of Congress. Science Policy Research Division. Science, Technology and Public Policy During the 90th Congress. Selected references for 1967-68. Washington, DC: USGPO, 1969.

U.S. Library of Congress. Science Policy Research Division. Technical Information for Congress. Report to the Subcommittee on Science, Research, and Development of the Committee on Science and Astronautics, U.S. House of Representatives, 92nd Cong., 1st sess., revised edition. Washington, DC: USGPO, 1971.

Vernick, Joel J. Selected Bibliography on Death and Dying. Prepared for DHEW by the National Institute of Child Health and Human Development, Bethesda, MD 20014.

Walters, LeRoy, ed. Bibliography of Bioethics. Vol. 1. $24. Detroit: Gale Research Co., 1975.
First of a series of annual volumes emanating from the Center for Bioethics, Kennedy Institute, Georgetown University.

Wilcox, Leslie D., Brooks, Ralph M., Beal, George M., and Klouglan, Gerald E. Social Indicators and Societal Monitoring: An Annotated Bibliography. Amsterdam: Elsevier Publishing Co., 1972.

E. GUIDE TO RESOURCES FOR AUDIOVISUAL MATERIALS: A SELECTED LIST

Further Reference

National Information Center for Educational Media
University of Southern California
University Park
Los Angeles, CA 90007

American Association for the Advancement of Science
1515 Massachusetts Ave., NW
Washington, DC 20005

AAAS Audiotapes, Reprints, Publications

This catalog lists audiotapes (cassette and reel-to-reel) of AAAS symposia dating from 1968. There is also a Special Audiotapes Series on such subjects as cancer, energy, and AAAS Newsletter items, a Reprints from Science series, and a publications list including periodicals and new and old titles in the area of science and technology.

AAAS Science Film Catalog

This catalog of special science films is available from RR Bowker, PO Box 1807, Ann Arbor, MI 48106, for $16.95.

AAAS Science Books and Films

This is a quarterly review and index of science books and films.

American Freedom from Hunger Foundation
1717 H St., NW
Washington, DC 20006

A Guide to Films About Development

A complete summary, this book is available for $1.50 in paperback.

American Science Film Association (ASFA)
University City Science Center
3508 Science Center
Philadelphia, PA 19104

ASFA concentrates on 5 areas: interdependence of world populations, teaching of health services, cinematography and research on energy sources, use of film from "earth resources satellites," and the integration of video and computer technologies. Also available is ASFA Notes, "a quarterly newsletter to inform ASFA members on matters related to the several motion media and their contributions to science and technology."

American Universities Field Staff Films
3 Lebanon St.
Hanover, NH 03755

The Field Staff does documentary-interview style films on anthropological aspects of recent technology. "Women Today" and "Faces of Change" are 2 recent series; the latter includes 5 films on the social and economic conditions of various indigent cultural groups, the socialization of the young in adapting and surviving, the general economics of survival, the status of women, and the group's political or religious beliefs.

Canadian Film Institute
National Science Film Library
Ottawa, Canada

Films on the History of Science

A pamphlet is available for $.75.

The Council for Philosophical Studies
Skinner Hall 1131
University of Maryland
College Park, MD 20742

Medical Ethics Film Review Project

The project gives reviews and availability information on 6 categories pertaining to medical ethics: death and dying, dependent persons, experimentation on human subjects and informed consent, life and the quality of life, professional responsibility, and the right to health care.

Doubleday Multimedia
PO Box 11607
Santa Ana, CA 92705

Dimensions of Change: How Technology Shapes Our Lives

This educational filmstrip is available with cassette or record soundtrack.

Environment Information Center
Film Reference Department
124 E. 34th St.
New York, NY 10016

The Environmental Film Review: Critical Guide to Ecology Films

This is a comprehensive bibliography and commentary, available for $20.

Goddard College Learning Aids Center
Plainfield, VT 05667

Goddard College Conference on Social Ecology

Four videotapes constitute an edited version of the 1973 conference, "an intensive exploration of the fundamental relationship of a technological society to ecology." Topics include practical discussions of solar houses, wind-generated electric power, methane digesters, and ecological construction techniques; reports on the local self-government movement in American cities; and discussion of the need and the prospects for an ecological society.

Introductory Guide to Audio-Visual Materials for the History of Science and Technology
c/o Professor Bruce Eastwood
Department of History
University of Kentucky
Lexington, KY 40506

In process, this 90 page work is oriented to the needs of the classroom teacher.

Lovejoy's Nuclear War
Green Mountain Post Films
Box 269 RFD 1
Montague, MA 01351

Billed as "a film about the citizen, our government, the law, and nuclear power," this is an hour-long documentary of Samuel Lovejoy's destruction of the weather tower built by Northeast Utilities as the first stage of a nuclear power plant. The film "presents a cross section of the many and varied points of view about nuclear power, civil disobedience, and the politics of energy that were drawn together by Lovejoy's act of sabotage and subsequent trial."

National Audiovisual Center
General Services Administration
Washington, DC 20409

Catalog of United States Government Produced Audiovisual Materials

The National Audiovisual Center is the central information and distribution point for federal government produced audiovisual materials. The catalog lists audiovisual materials available for rent or purchase.

The Poynter Center on the Public and American Institutions
Indiana University
Sycamore Hall 217
Bloomington, IN 47401

Citizen and Science Project Videotapes

The Citizen and Science Project has produced a series of 1 hour videotapes on the following topics: the adversary relationship between science and art, the role of government in scientific research, the "two cultures" view of science and literature, sociology of scientific research, the morality of medical research, the emergence and acceptance of scientific theories, ideational aspects of theory construction, the social context of technological innovation, and the role of social sciences in cultural and technological change.

Purdue University Audio-Visual Center
West Lafayette, IN 47907

Selecting and Evaluating Non-Print Materials

This volume includes reprints of articles offering guidelines for educational uses of audiovisual materials and selected lists of indices and catalogs, university film rental libraries, and publications providing media reviews.

Research in Literature and Industry
5622 Dyer St., Suite 108
Dallas, TX 75206

This organization publishes a slide series in the history of technology.

St. John's University
The Television Center
Grand Central and Utopia Parkways
Jamaica, NY 11432

The Web of Population, Inflation, Energy, and Government

Originally a 54-part summer semester television series in which each of 24 lecturers articulates his input and special knowledge, this is now available as a videotape series.

University of California Extension Media Center
Berkeley, CA 94720

Lifelong Learning Films in Science and Society

The center makes available, for rent or purchase to individuals or groups, films on such topics as: communications and media; special aspects of industry and management; issues in education; futures studies; medical sciences; minority Americans; social studies issues in science and law; issues in physical and life sciences and mental health; transportation; women; and world affairs. The center also publishes a weekly informational bulletin, Lifelong Learning, which includes an annual audiotapes review.

University of California, Los Angeles, School of Medicine
c/o Professor Bernard Towers
Medicine and Society Forum
Los Angeles, CA 90024

Medicine and Society Tapes

A series of videotapes produced under the auspices of the Medicine and Society Forum and with the assistance of the Institute on Human Values in Medicine, the subjects covered include: fetal, parental, and societal considerations in intrauterine diagnosis in early pregnancy; attempted suicide and appropriate medical care; informed consent; definitions of death; and malpractice.

University of Utah
Division in Continuing Education
PO Box 200
Salt Lake City, UT 84110

Video Cassettes on Science and Society

Originally designed for a course on physics and society, the cassettes consist of 10 discussions of such topics as futurism, arms control, energy development and innovative alternatives, communications systems and theory, astrophysics and cosmological theories, science and public policy (in ecology, data retrieval, etc.), experiments in physics, and contributions of science to economic well-being.

Videolearning Systems, Inc.
10 Presidential Blvd. North
Bala Cynwyd, PA 19004

Today's Biological Revolution

This series consists of 54 half-hour video cassettes covering topics from biological research to medical and mental problems and the social aspects of biological inquiry.

Frontiers of Electronics

This series is a 36 part program covering topics from electronic theory to computers and the brain to decision making in biomedical engineering. The price of the cassettes is $100; rental fee is $40.

The Projection of '70s Series

This series is a 6 part color commentary on the decade's prospects in transportation, communication, food, medicine, education, and urban systems. Cassettes cost $285, $1500 for the series. Rental fee is $30 for the series.

Visual Education Corporation
Princeton, NJ 08540

Atomic War/Atomic Peace: Life in the Nuclear Age

A series of 6 audio cassettes covers the following topics: early experiments, atomic bombing of Japan, testing and nuclear paranoia, cold war, peaceful uses, and nuclear safety. The program uses interviews and archival materials from the Atomic Energy Commission, the National Archives, and the National Broadcasting Corporation. Distributed by: The Baker and Taylor Companies, Oral History Program, Drawer Z, Momence, IL 60954.

F. RESOURCES FROM SPECIALIZED PUBLISHERS, CURRICULUM PROJECTS, AND ORGANIZATIONS: A SELECTED LIST

Arno Press
330 Madison Ave.
New York, NY 10017

History, Philosophy, and Sociology of Science

This series of 60 books is founded on the premise that "as science comes to be regarded as a source of social problems, it also elicits a growing interest as a cognitive discipline and institutional structure." Ranging from the 18th to mid-20th centuries, this series includes books by and about scientists and scientific societies, festschriften on critics of the scientific enterprise, accounts of the comparative development of science in differing social and political contexts, and popular views of current positive science.

Technology and Society

This series is a collection of 53 books, mostly reprints, offering an historical approach to technologies in America by the documentation of specific cases. These books document the internal development of technologies and illustrate major innovations or revolutions.

The Bobbs-Merrill Company, Inc.
Indianapolis, IN 47907

History of Science Reprint Series

This series consists of reprints of famous works in the following areas: ancient and medieval science, the scientific revolution, physical sciences and mathematics, life sciences and geology, and science, technology, and society.

Center for International Programs and Comparative Studies
State Education Department
State of New York
Albany, NY 12224

Teaching About War and Its Control

This series includes an annotated bibliography of books, films, and other materials for the classroom teacher, and covers such topics as U.S. foreign policy, teaching about the future, the psychology of aggression, the use of history and literature in disarmament education, and nationalism and internationalism.

Global Development Studies Institute
PO Box 522
14 Main St.
Madison, NJ 07940

Global Development Studies

The studies are a model curriculum for secondary schools and undergraduate colleges. They include annotated bibliographies in various fields related to technological innovation.

International Council for Science Policy Studies
Dr. I. Spiegel-Rösing, Secretary/Treasurer
Abteilung fur Wissenschaftsforschung
Universitat Ulm
D-79 Ulm, Postfach 4066
Federal Republic of Germany

Science Policy Studies in Perspective

This volume, in preparation, presently includes 13 chapters by leading critics of science on such topics as: models of the development of science; institutional development of science; scientists, technologists, and political power; conditions of technological development; structures and processes of science and technology policy; public and military connections to science and technology programs; technology of production in underdeveloped countries; and science and values. Inquiries can be addressed to the editors: I. Spiegel-Rösing (Universitat Ulm) and D. de Solla Price (Yale University).

National Information Center for Educational Media
University of Southern California
University Park
Los Angeles, CA 90007

Index to Ecology-Multimedia

This index contains 11,000 annotated entries in ecology. Cost is $19.50 postpaid. A bimonthly update is also available.

National Science Teachers Association
1742 Connecticut Ave., NW
Washington, DC 20009

Energy-Environment Source Book

This book contains 2 volumes. The first "deals with the interaction of energy with the environment, the economy, employment, and national and international policy." The second "describes the basic facts of energy."

Energy-Environment Materials Guide

The guide is primarily an annotated index of "the most important and accessible current energy literature," but also contains student reading lists, a guide to multimedia materials, and a survey of existing energy curriculum efforts.

The Open University
Harper and Row Publishers, Inc.
10 E. 53rd St.
New York, NY 10022

A multi-media program originally designed as self-teaching modules in traditional college courses for Britain's Open University, these courses are now available to the general public. Through textbook modules, films transferred from original BBC television productions, audio cassettes from BBC radio, and correspondence, persons who cannot attend school full time because of work, family, or location can complete a college degree through audiovisual self-teaching methods. Various technology/society courses use such films as "Resource Conflicts," "The Implications of a Permanent Arms Economy," "The Computer and Society: Good For What?," "Science and Society," "Energy Conversion/Power and Society," "Science and Belief: The Argument From Design," and "Coal and the Nineteenth Century"; audio cassettes such as "Science and the Mechanistic Universe" and "Science and Belief in Eighteenth Century France"; and books such as Scientific Progress and Religious Dissent, The "Conflict Thesis" and Cosmology, Science and Engineering, People in the Electronic Age, The Industrialization Process, Science: Its Origins, Scales, and Limitations, and Technology, Society, Religion and the Arts.

D. Reidel Publishing Company, Inc.
306 Dartmouth St.
Boston, MA 02110

Boston Studies in the Philosophy of Science

The studies, consisting of topical anthologies and interdisciplinary approaches to traditional issues in the philosophy of science, include contributions not only from the scientific-philosophic community. but also from sociologists of science, linguists, psychologists, physicians, and literary scholars. The editors claim "the modest merit of an open sympathy to all serious efforts to understand the scientific enterprise from whatever viewpoint," in order to "find help across disciplinary boundaries of content, approach, and presuppositions, but also across decades, centuries, even epochs and civilizations."

Science in a Social Context Project (SISCON)
Dr. W.F. Williams, Coordinator
Room 9/83
Physics Administration Building
University of Leeds
Leeds LS2 9JT
England

Originally a series of teaching units for British curricula, SISCON aims to focus on specific issues in the following areas: the sociology of science, the interaction of science and politics, the social reception of scientific ideas, technology and development, research and technology as economic activities, industrial aspects of technology, environmental problems, and legislation of technological activities. SISCON publishes a "Unit Summaries" booklet, which lists the aims, issues, and contents, reading materials, and teacher's programmed text for each "unit" or course. One feature of the project is its imaginative synthesis of viewpoints in each unit. Such topics as aspects of scientism, conceptions of rationality in technology and decision theory, limits to growth, health hazards in industry, genetic resources and food, and knowledge, decisions, and power claim as much space as more standard topics.

UNIPUB (United Nations and International Publications, Inc.)
Box 443
Murray Hill Station
New York, NY 10016

UNIPUB, the "central source in the United States for scholarly, scientific, and technical publications of international scope," distributes new publications of the UN system and other international information publishers. Publishing organizations include the Food and Agriculture Organization, the General Agreement on Tariffs and Trade, the International Atomic Energy Agency, the United Nations Educational, Scientific, and Cultural Organization, the World Meteorological Organization, and the United Nations General Assembly meetings, hearings, and special sessions. Special topics include: mass media and world communication, nuclear science and technology, multinational corporations, continuing education, international use of data systems, and business and trade regulations and statistics. Major UN reference works, such as the UNESCO statistical yearbook, are also available.

University Microfilms, Inc.
300 N. Zeeb Rd.
Ann Arbor, MI 48106

Out-of-Print Symposia Titles

This group makes microfilms of out-of-print symposia proceedings, some of which concern issues in science and society. Current listings are available upon request.

COURSE INDEX

SAMPLE ITEM IN COURSE INDEX

institution
code # course #
2360-03

To locate this item in the text:

1. Go to course section (IA).
2. Locate institution code number (find 2360 between 2350 and 2370).
3. Under institution 2360, find course designated c03 (find c03 between c02 and c04).

For further explanation of the arrangement of the course index, see page xiii, "How to Use This Guide."

ECONOMICS, BUSINESS, DIFFUSION OF INNOVATIONS

General Science/Technology

0260-15
0270-12
0410-07, 08, 12
0440-01
0540-11
0580-16
0590-03
0610-14
0630-07
0700-08
0760-05
0980-03
1000-09
1040-07
1440-02
1510-20
1570-11
1650-09
2050-20
2190-08
2220-21, 22
2250-01
2470-06
2670-03, 04
2810-03
3200-11
3250-08
3280-01
3490-01
3690-02
3750-11, 17, 24

Life Sciences/Biotechnology

0270-03, 07
0540-10
1000-05
1550-20
1560-25
2400-15
2800-01
3590-05

Social Sciences

1330-05
2010-04
2040-02

Special Topic Areas

agriculture, food

3200-08

arms control, national security, etc.

3070-08

communications, computers, and cybernetics

0300-05
0430-05
0870-05
1510-14
1560-05

energy, resources

0280-01
0840-02
0870-03, 05
1920-01
2810-02
3030-21
3070-08
3120-05
3150-37
3200-16
3260-05
3320-13

environment

0300-04, 13
0320-01
0350-02, 03
0380-25
0400-01
0510-02
0560-16
0610-08

environment (cont.)

0700-06
0810-02
0950-10
1130-01
1260-05
1400-01
1510-14, 18
1540-02
1560-05, 11, 12
1660-03
1780-01
1830-05
2080-01
2130-02
2210-05
2240-02
2330-01
2470-07
2500-01
2570-02
2730-01
2800-02
2810-02
2990-01
3030-28
3100-02, 03
3320-07
3850-01
3870-02
3940-03, 04

management, administration

0610-02
2580-15

marine affairs, oceans

0580-05
0870-02
3750-36

transportation

0570-07
1100-22
2050-10
3310-01

urban affairs

0540-07
0960-01
1560-07
2050-08
2460-05
3030-20
3430-08
3920-04

GENERAL OR CULTURAL IMPACT

General Science/Technology

0010-01, 03
0020-01
0030-04, 05, 08
0050-01
0070-01
0080-01, 02, 03
0100-01, 02, 03, 04
0110-01
0130-01, 07
0140-01, 02
0400-02, 03
0420-05
0430-01, 04, 07, 09
0490-01
0520-01, 02
0530-03
0540-04, 05, 12
0550-03
0560-03
0580-12, 13
0590-11, 12
0630-06, 08
0660-01
0670-05
0690-01, 02
0700-03, 04, 07, 09, 15, 16, 17
0710-02
0730-01
0750-03
0760-04
0770-01
0820-01
0860-02
0870-07
0900-04, 05
0920-03, 05
0930-04, 05
0940-01
0950-02
0980-06
0990-03, 06
1000-01, 02, 06, 10, 11, 12
1020-01, 03

General Science/Technology (cont.)

1030-01, 02, 05
1040-07, 08, 10
1050-04
1060-01, 02
1090-02
1100-09, 10, 15, 21, 28, 30, 31, 34, 35, 39
1120-01, 02, 03
1140-02, 03
1180-02, 06, 07, 08, 09, 10, 11, 13, 15
1190-01, 02
1210-02
1230-01, 02
1260-09, 11
1330-03
1340-02, 06, 07, 08
1350-02
1370-03
1380-07, 08
1420-05, 09, 10, 11, 12
1440-03, 04, 07
1450-01, 14
1480-01, 02
1490-01
1510-07
1520-02, 04
1550-16
1560-10, 15, 22, 23, 24, 26
1570-07, 18, 19, 23, 39, 40, 49
1630-03
1640-10, 11, 13, 15
1650-11
1670-01
1700-02, 03, 10
1720-04, 06
1730-01
1740-01
1750-02
1760-01
1770-02, 04, 09
1780-02, 05
1790-03, 04, 15, 18, 19, 23
1820-02, 05
1840-01, 02, 05
1850-01
1870-01
1880-01
1890-02, 04
1920-02, 03
1930-02
1970-01
2010-06
2020-01
2030-01
2040-01
2050-02, 03, 13, 16
2060-05, 06, 10, 13, 15, 21
2070-01
2080-03, 09, 10
2100-02
2120-01
2150-01
2160-01
2180-04
2190-04
2200-05, 15, 22
2220-04, 13, 14
2230-01
2240-03
2250-09
2270-03
2280-04
2290-01
2300-01, 02
2310-02
2320-01
2360-03
2400-03, 06
2410-02, 03
2460-06, 09, 13
2470-02
2480-01, 04
2500-03
2540-01
2560-01
2570-04
2580-01, 06, 07
2590-03
2600-06
2620-04, 07
2660-01
2670-07, 08, 10, 13
2690-03, 04
2700-03
2710-08, 09, 10
2720-01, 05, 06
2740-01
2760-02, 03, 05, 06
2780-01, 02
2790-02, 03
2800-03
2810-01

General Science/Technology (cont.)

2820-02, 04
2830-01
2850-01, 02
2860-01
2880-01, 02
2890-01
2900-01, 02, 03, 04, 05
2910-01
2930-01
2940-03
2960-03
3000-01
3010-06
3020-01, 02, 03, 05
3030-07, 12, 13, 15, 18
3040-01
3050-01, 03, 04
3060-04
3070-01, 03, 04
3120-03, 06, 07
3130-01
3150-22, 31, 42, 44
3160-01
3170-02
3190-01
3200-05, 06, 11
3220-01
3230-01
3250-03, 08, 09, 15, 16, 18
3260-08, 10, 16, 18, 21, 29
3290-01, 02
3300-02
3310-03, 06
3320-04, 06, 12
3330-01
3350-02
3400-01, 02
3430-01, 02
3450-01
3460-01
3470-02
3480-01
3550-01
3560-11
3570-01
3610-01, 02, 05, 06
3630-01, 02
3650-02
3680-01
3690-20
3720-01
3730-08
3750-20, 31
3800-03, 04, 06, 07
3870-03
3880-01, 02
3920-06, 20
3950-01
3970-02

Life Sciences/Biotechnology

0150-01, 02
0230-01
0280-02
0290-02
0340-01, 02
0380-01
0420-01
0550-01
0560-07
0600-19
0740-02, 03
0790-01
0840-03
0910-01
0960-03
1000-08
1070-09
1250-05
1260-03
1380-04
1430-01, 02
1450-15, 16, 19
1520-03
1530-01
1550-12
1720-01, 02
1770-03
1920-04
1990-01
2050-01
2060-02, 07, 20
2130-01
2190-02
2270-01
2280-01, 02
2390-01
2470-05
2530-01
2600-01, 02
2640-02
2690-02
2710-01, 12
2960-02

Life Sciences/Biotechnology (cont.)

3020-13
3250-07
3320-01
3350-01
3500-01
3540-03, 04, 06
3820-01
3920-08

Social Sciences

1840-07
2820-06
3200-04
3320-09
3740-01

Special Topic Areas

agriculture, food

1100-23

biomedical ethics/problems

0420-02
0560-13
0600-07, 08
1000-04
1100-23
1260-01, 02
1300-01
1430-06
1570-52
1640-08
2180-05
2270-02

communications, computers, and cybernetics

0180-03
0200-01
0260-01, 08
0270-01
0290-05
0380-26
0410-14
0420-03
0630-05
0650-01
0700-14
0870-01, 05
1090-01
1160-03
1240-04
1350-01
1560-05, 06, 08, 09, 18, 28
1890-05, 07
2130-04
2140-01
2200-21, 23
2220-12
2490-06, 07
2570-01
2580-03, 04
2680-02
2710-03
2870-01
2980-01
3010-04
3020-04
3110-01
3140-05
3150-13, 17, 18, 23
3310-02
3920-10

education, media, public understanding

0260-13
1790-27
1930-11
3230-02
3690-03, 15
3890-06

energy, resources

0280-04
0290-11
0430-08
0710-01
1050-03
1260-13
1510-13
1550-07, 11
1570-17
1840-03
1930-03, 09
2520-01
2580-02
2590-08
2810-04

energy, resources (cont.)

3030-26
3200-14
3690-09
3750-26
3920-05

environment

0060-01
0090-03
0180-02, 04
0220-01
0260-14
0350-01
0380-02
0480-01
0540-13
0630-09
0650-01
0700-02, 13
0930-01, 03
0980-01
1050-01
1070-05
1240-01
1250-01, 04
1260-08
1320-01
1330-01
1360-01
1510-01, 02
1520-01
1570-35
1590-01
1600-03
1650-07
1690-01
1700-04, 05
1780-01
1840-08
1890-10
1900-01
1930-04
1960-01
2010-07
2050-04, 05
2180-02
2200-09, 10
2240-01
2250-03
2310-01
2420-01
2440-01
2460-07, 14
2490-12
2510-04
2570-03
2590-06
2600-09
2630-02, 03
2640-01
2650-01
2690-06
2710-04
2850-06
2860-02, 03, 04
3030-17
3090-01
3100-01
3150-05
3170-01
3200-21
3220-02
3240-01, 02
3260-22, 27, 30
3280-02
3310-05
3340-01
3360-02
3370-01
3380-01
3390-01
3410-01
3470-01
3620-01
3640-01
3790-01
3820-05
3850-04
3860-02, 03
3870-06, 10
3940-01, 08
3960-01
3970-03

marine affairs, oceans

2670-09
3750-27

transportation

0410-17
0580-09
2050-10
3320-03
3920-17

urban affairs

1070-08
1560-07
1570-53
2650-21
2190-03
2480-02
2580-01
3460-02
3540-13
3750-21

FORECASTING, TECHNOLOGY ASSESSMENT, FUTURES

General Science/Technology

0030-03
0100-01
0230-02
0260-02, 04, 05, 06, 19
0420-04, 05
0470-01, 04
0670-04, 06
0760-06, 07
1100-06, 07
1110-01, 02
1260-10, 11
1570-30, 40, 43
1650-08, 09
1790-10, 19, 25
1930-01, 07
2040-01, 03
2280-03, 04
2830-02, 03, 04
2940-01, 02, 04
3070-06, 09
3150-07, 24
3420-01, 03
2560-04, 07, 08, 09, 10, 11, 12
3690-14, 16, 19
3750-08, 15, 19
3950-01, 02

Life Sciences/Biotechnology

1240-06
3970-01

Social Sciences

1560-29
1790-16, 22
1890-09
2400-09
2850-05
3320-08
3680-03
3750-04

Special Topic Areas

biomedical ethics/problems

1200-02
1260-01, 02
3170-04
3320-10
3920-02

communications, computers, and cybernetics

0630-04
1260-12
1890-07

energy, resources

0280-04
0290-11
0700-12
0870-06
0980-05
1260-13
1840-04
3020-07
3070-05
3350-04
3560-01

environment

0350-04
0430-02
1240-02
1700-04
1790-24
2250-03
2260-02
2310-01
2460-12
2850-04
2930-03

environment (cont.)

3200-19
3350-03

management, administration

0470-02
0610-05
1860-01
3260-14

urban affairs

1570-53
1930-10
3920-23

HISTORY

General Science/Technology

0010-01, 03
0030-07
0070-01
0090-04
0140-01, 02
0160-01
0210-02
0240-01
0250-03, 04, 08, 09
0260-03, 18
0270-11, 12, 14, 15
0280-05, 06, 07, 09, 10
0290-12, 13
0380-16, 17, 18
0390-01, 03
0410-06, 10
0480-02, 04
0540-02, 03, 08, 12
0560-01, 02, 03, 05, 06, 10, 18, 22
0580-14, 15, 17, 18, 19
0610-06, 07
0690-01, 02
0700-08, 10
0740-01, 04, 05
0760-13, 14, 18, 19
0950-02, 04, 05
0980-04
1000-02, 05
1040-10, 11, 12, 13, 14, 16
1060-03, 09, 11
1100-01, 26, 32, 33, 35, 36, 37
1140-02, 03
1180-01, 02, 03, 04, 05, 06
1260-09, 10
1350-03
1380-01, 03, 05, 06, 07, 08, 10
1420-01, 03, 04, 05, 09, 10, 11, 12, 15, 16
1440-01
1450-04, 05, 06, 07, 08, 14, 17, 18
1500-01
1550-15
1560-13, 14, 17, 22, 23
1570-01, 19, 20, 21, 22, 23, 24, 27, 39, 41, 45, 47
1580-02
1600-02
1610-01
1620-01
1640-13
1650-11
1660-05, 06
1700-06, 07, 08
1750-01
1770-04, 06, 10, 11
1780-02
1790-04
1840-01
1850-01
1870-01
1890-01
1920-02, 03
2050-11, 12
2060-03, 04
2080-04, 05, 09
2090-01
2120-01
2130-03
2160-01, 02
2170-01
2180-01
2200-05, 15, 16, 18
2220-14, 19, 27
2240-04
2250-02, 04
2270-05
2280-03
2340-01
2350-01
2360-03
2380-02
2400-03, 04
2470-09
2490-09, 10, 11
2570-04

General Science/Technology (cont.)

2670-07, 08
2690-04
2710-08, 09, 10
2760-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12
2790-02
2820-03
2850-01
2900-04
2930-02
2950-01
3020-05, 12
3030-10, 12, 13, 15, 16, 24, 25, 27, 30
3060-02
3070-02, 03, 04
3100-04, 05
3120-03, 04
3130-03
3140-01, 03
3150-01, 03, 06, 16
3200-03, 10
3250-04, 10, 11, 13, 14, 15, 16, 17, 18
3260-07, 09, 10, 13
3310-04, 06, 07, 08
3400-01, 02
3430-02
3530-01
3570-01, 02, 03, 04
3690-11
3730-01, 02, 03, 04, 05, 06, 07, 11
3750-30, 31, 32, 33
3800-01, 02, 05, 06, 07
3870-03, 04
3890-01, 03
3920-01, 15

Life Sciences/Biotechnology

0280-08
0420-01
0570-05
0580-20
0780-02
1010-03
1100-34
1420-02, 06, 07, 08, 20
1450-15
1550-14
1560-16
1770-03
2050-14
2080-07
2200-17
2210-01, 02
2220-20, 26
2300-01
2720-03
3210-09, 10
3250-07
3260-11
3540-04

Social Sciences

1450-24
2620-01

Special Topic Areas

arms control, national security, etc.

0380-15, 19
0760-01, 02, 03
0900-02
2710-07
3750-29

biomedical ethics/problems

0580-03
2210-03
3270-02

communications, computers, and cybernetics

1700-09
2680-02

energy, resources

3730-09

environment

0380-03
0810-02
1700-05
1770-05
2460-07
2850-03
3030-23

environment (cont.)

3310-05
3850-03

transportation

0580-09
3030-11
3920-17

urban affairs

3030-22
3210-12
3430-08, 09
3920-16

INTERNATIONAL ASPECTS, TECHNOLOGY TRANSFER

General Science/Technology

0250-06
0260-07
0300-02
0360-01, 04
0390-07
0470-01
0590-10
0610-03, 13
0640-02
0760-02
0860-02
1040-01
1100-11, 19, 28
1180-07, 08, 09, 10, 11, 18
1440-03
1510-20
1560-10
1570-13, 14, 15
1580-03
1640-01, 07
1650-01, 02, 03
1930-08
2050-17, 18
2220-02, 03, 04, 05, 09
2250-06
2270-04
2400-02
2800-01
2810-01
2900-06
3150-27, 28, 30, 31, 32, 33, 35
3250-14
3310-03
3350-05, 06
3750-41
3820-04
3890-05

Life Sciences/Biotechnology

3590-08
3820-03

Social Sciences

2380-03
2450-05
3690-17

Special Topic Areas

agriculture, food

1310-01
3150-43
3200-08

arms control, national security, etc.

0410-11
1510-22
1570-05
2690-07
3070-08
3150-21
3690-13
3750-18
3920-07

energy, resources

0280-01
1510-17
1570-08
1640-02
2200-13
2520-01
2650-02
3150-29, 37

environment

0130-02
0270-19
0600-10
0760-09

environment (cont.)

1540-02
1640-03, 05
2050-19
3540-08

management, administration

0590-07

marine affairs, oceans

3150-34
3750-35, 39

transportation

2220-01

urban affairs

2380-04
3260-01

LAW, LEGAL ASPECTS

General Science/Technology

0040-02
0070-04
0270-20
0290-08
0430-04
0530-03
0580-06
0620-01, 02, 03, 04, 05
1080-01
1460-10
1570-33
1610-07
1700-14
2050-17
2200-12
2220-21, 22
2460-08
2760-13
3030-03, 04, 05, 06
3080-01
3150-32, 33
3520-01
3910-03

Life Sciences/Biotechnology

0040-01, 03
0270-07
0330-04
0570-03
0700-01
1080-04
1400-02
1410-01
1460-01, 02, 03
1680-01
2200-20
2210-04
2220-30
2280-05
2920-01
2970-02
3210-04, 05
3440-01
3590-04, 05
3600-01
3900-03
3930-01
3980-01

Social Sciences

0530-02
0570-04
1460-08
1550-18
3910-04

Special Topic Areas

biomedical ethics/problems

0190-01
0570-01, 02, 06
0600-12
1010-02
1220-01
1400-03
1460-06, 07
1980-01
2720-02
3910-01, 02

communications, computers,
and cybernetics

1460-09
1560-09

communications, computers, and cybernetics (cont.)

2200-21
2220-29
2550-01
2770-01
2970-01

energy, resources

1080-02
1640-06
3980-02

environment

0020-02
0190-01
0270-19
0290-08
0300-04, 12
0330-03
0380-03, 04, 06, 07
0410-13
0510-01, 02
0570-01, 02, 06
0600-12
0750-01
0800-01, 02
0920-02
0990-04
1010-02
1040-17
1050-02
1080-03
1130-01
1220-01
1260-04
1330-04
1400-01
1460-11, 12
1510-04, 18
1570-37, 38
1590-01, 02
1640-05
1650-05
1680-02
1790-05
2130-02
2200-08, 19
2220-15, 28, 31
2330-02
2440-03
2450-01, 02
2460-11
2920-02
3080-02
3170-03
3260-19, 22
3270-01
3300-01
3430-10
3640-03
3670-01
3750-03
3870-09

management, administration

0410-01

marine affairs, oceans

0580-05
3710-02
3750-35, 38

transportation

2920-03

urban affairs

3260-02
3430-09

LITERATURE, ART

General Science/Technology

0010-02
0140-03
0250-02
0270-21
1260-06, 07
1280-01
1340-04, 06, 10
1380-02, 03
1450-03
1570-42
1720-03
2060-01, 11
2200-04
2270-03
2400-12
2760-15
3010-03
3120-01, 02
3150-06, 07, 08, 10, 11, 20
3290-02
3320-02

General Science/Technology (cont.)

3540-07
3560-06, 07
3660-01
3690-12
3860-01
3890-01, 02
3920-09, 11, 12, 13, 14

Life Sciences/Biotechnology

0250-03
2060-09
3210-06, 07, 08, 13

Social Sciences

2400-09
3150-36

Special Topic Areas

environment

0220-01
0380-05
1650-07
1890-06
2060-14
2850-07
3150-05

PHILOSOPHY, RELIGION, ETHICS, VALUES

General Science/Technology

0030-02
0090-05, 06, 08
0130-05
0150-01, 02
0240-01
0250-04, 07
0270-09, 10, 20, 21
0280-12, 13
0300-06, 09
0360-06, 10
0390-03, 06
0400-03
0410-06, 10
0430-09
0540-01, 08
0560-19
0580-07
0600-14
0610-10
0670-01, 02, 03
0720-01, 02
0760-12, 15, 17
0870-10, 11
0930-04
0950-05, 08, 09
0990-05, 06
1000-06
1040-08, 12, 13, 14, 16
1060-03
1070-10, 13
1100-01, 02, 03, 04, 05, 06, 07, 21
1120-01, 02, 03, 04
1140-01
1160-02
1180-14, 16, 17
1200-03
1210-01, 02
1270-01, 04
1290-01
1310-02
1340-02, 09
1350-03
1380-06, 09, 10
1420-13, 14, 15, 16, 17, 18, 22
1440-05
1450-02, 21, 23
1460-10
1480-01, 02
1500-01
1540-01
1560-17
1570-01, 20, 31, 44, 45
1580-02
1610-03, 05
1620-01
1650-04
1660-04, 07
1690-02
1700-08, 09, 12
1720-06
1770-02, 10, 11, 12
1780-04, 06
1790-06, 18
1820-05

General Science/Technology (cont.)

1830-01
1840-06
1890-01, 03
1930-02
1940-01
2010-05
2060-08, 12, 16
2100-02
2130-03
2150-04
2170-02
2200-02, 03, 12
2220-23
2250-02, 03, 06
2340-01, 02
2380-02
2400-01, 02, 12
2410-01
2470-01
2480-04
2590-03
2600-03, 10
2620-10
2640-03
2670-05, 12
2690-05
2720-04
2750-02
2780-03
2840-01
2850-02
2950-01
2980-03
2990-02
3000-01
3010-05
3030-29
3120-02, 04
3130-03
3140-04
3150-02, 03, 04, 25
3190-01
3200-01, 02, 10, 13, 15, 20
3250-01, 09
3260-16
3300-03
3320-05
3330-02
3360-01
3420-02
3430-04
3520-01
3530-01
3540-11, 12
3560-09
3570-04
3630-01
3640-04
3680-02
3690-08, 12, 14, 21, 22
3730-10
3750-07, 16
3760-01
3820-04
3870-05, 11
3890-04
3920-01, 03, 06, 18, 19
3940-10

Life Sciences/Biotechnology

0040-01
0220-03
0250-05
0270-04
0280-02
0340-02
0550-02
0560-02, 10
0580-01, 04
0600-02, 09
0700-01
0780-01, 02, 03, 04, 05, 06
1040-04, 05
1240-06
1400-02
1420-20
1450-22
1560-01, 04
1770-01
1800-01
1980-04, 07, 10
2010-03
2050-01
2060-19
2210-01, 02, 04
2220-20
2360-04
2400-05
2430-01
2580-12
2600-01, 14
2920-01
2930-07
2970-02

Life Sciences/Biotechnology (cont.)

3010-01
3100-06
3210-03, 04, 05, 13
3240-04
3260-11, 12
3280-04
3300-04
3440-01
3510-03
3590-01
3600-01
3700-01, 02
3770-01
3820-02, 03
3930-01, 02
3940-02
3970-01

Social Sciences

0530-04
0760-16
1100-38
1340-05
1420-19, 21, 23
1580-04
1790-14
2020-04
2500-02
2600-08
2620-02, 04, 05, 08
2850-05, 07
3150-09, 36, 40
3200-04
3210-11
3260-03
3280-05
3690-17

Special Topic Areas

arms control, national security, etc.

1610-06

biomedical ethics/problems

0190-01
0300-10
0310-01
0330-01
0370-01, 02, 03, 04, 05
0400-04
0420-02
0440-02
0530-01
0560-11, 13
0570-01, 02, 06
0580-02
0600-01, 03, 04, 05, 06, 07, 08, 12, 13
0780-07
0880-01
0890-01
0920-06
0950-07
0960-02
0990-07
1010-01
1020-02, 04
1040-06
1200-02
1220-01
1250-03
1300-01
1340-03
1370-01
1390-01
1400-03
1410-02
1420-24
1430-03, 06
1450-20
1460-06, 07
1560-02, 03
1570-29, 51
1600-01
1610-08
1620-02
1630-02
1640-14
1650-10, 12
1660-08
1780-08, 09
1820-01, 03
1830-06
1910-01
1940-02
1950-01
1980-01, 02, 03, 05, 06, 08, 09
2000-01
2190-01
2200-06, 07
2210-03

biomedical ethics/problems (cont.)

2220-06
2270-02, 06
2350-02, 03
2360-01, 05
2370-01
2400-10
2420-02
2590-02
2600-07
2610-01
2620-11
2630-01
2720-02
2760-16
2930-06
2960-01
2980-02
3020-14
3120-08
2150-41
3170-04
3200-09
3210-02
3260-15
3270-02
3280-03
3320-10
3420-04
3510-02
3590-02, 03
3650-01
3660-02
3740-02
3810-01
3900-01, 02
3920-02

communications, computers, and cybernetics

0410-09, 14
1260-12
2080-08
2970-01
3110-01
3150-23

education, media, public understanding

2400-11
3690-03

energy, resources

1040-15
1790-09
3010-02

environment

0290-03
0380-01
0480-01
0540-14
0810-01
0840-01
0860-01
0990-01
1110-08, 24
1220-01
1240-03, 05
1550-17
1590-01, 02
1770-05
1780-03
1830-02
1890-01
1900-01
2200-09
2220-07
2340-03
2440-02
2490-01
2510-05
2580-17
2930-05
3050-02
3180-01
3540-09
3750-01
3870-07
3940-07
3970-03

marine affairs, oceans

3710-02

urban affairs

1610-02
1790-02
3920-16

POLICY, SOCIO-POLITICAL ASPECTS, DECISION MAKING

General Science/Technology

0020-03
0030-03
0070-02, 03, 04
0090-10
0110-01
0120-01, 02
0260-07, 18
0290-01, 09
0300-08
0360-01, 04
0410-07, 16
0450-02
0470-03
0560-04, 15, 20
0580-08
0590-03, 08, 13
0600-11
0610-01, 03, 11, 12, 13, 14
0620-01, 03, 05
0640-02
0700-09
0750-03
0760-05, 08, 21
0850-01, 02
0870-07
0900-04
0950-01, 06
0990-05
1000-09
1030-06, 07
1040-04, 05
1050-04
1070-01, 02, 03, 15
1100-10, 11, 12, 13, 15, 17, 18, 19, 20, 27
1140-04
1160-02
1260-03, 06, 07
1280-01
1290-01
1310-02
1340-01
1370-02, 03
1380-05, 09
1440-02, 06
1450-01, 04, 07, 09, 10, 12, 13
1470-02
1510-08, 12, 14
1540-01
1550-03
1560-19, 21
1570-02, 03, 07, 10, 11, 12, 13, 14, 15, 16, 25, 26, 36, 44, 50
1640-01, 07
1650-08, 17
1700-10, 14
1770-01, 06
1790-06, 07, 25
1810-01
1830-03
1890-03
1930-05, 07, 08, 13
1940-01
1970-02
2050-16, 20
2060-17
2080-06
2090-02
2150-04
2170-02
2200-18, 22
2220-03, 05, 08, 09, 10, 11
2250-08
2270-04
2310-03
2400-07, 16
2460-08
2470-03
2490-01, 08, 13
2510-01
2580-08, 09, 10, 14
2600-10
2620-06, 07
2670-01
2700-01
2710-11
2740-02
2760-13, 14
2830-01, 02, 03
2900-05, 06
2910-02
3030-04, 05, 08, 09, 14, 16
3060-03
3140-02
3150-26, 27, 28, 30, 44
3200-12
3260-17, 21, 24
3320-14
3510-01
3530-04
3540-02, 10
3560-04
3690-18

General Science/Technology (cont.)

3700-01, 02
3750-05, 06, 10, 11, 12, 20, 22, 23, 40, 41
3890-05, 07
3920-18
3940-05

Life Sciences/Biotechnology

0270-03, 04, 05
0300-01
0540-10
0560-08
0580-04
0790-01
1080-04
1430-01, 07
1460-04, 05
1550-19
1570-09
2060-19
2200-20
2210-06
2280-05
2400-05, 14
2430-01
2600-13
2670-11
2720-03
2930-07
3300-04
3590-04, 06, 08
3920-08

Social Sciences

1070-14
1420-23
1460-08
1550-18
1580-04
1710-01, 02
1790-16, 17, 22, 26
2620-01, 02

Special Topic Areas

agriculture, food

0270-08

arms control, national security, etc.

0360-02, 03
0410-11
0590-14
1560-20, 27
1570-06
2220-18
3920-07

biomedical ethics/problems

0600-05
1430-03
1560-02
1570-51
1650-06
1910-01
3200-09

communications, computers, and cybernetics

0270-17, 22
0300-05
0410-15
0610-09
0970-01
1560-08
2080-08
2200-01
2220-29
2550-01
3150-15

education, media, public understanding

1790-27
3150-39

energy, resources

0270-06, 16, 18
0280-03
0300-03
0500-01
0640-01
0870-03
0900-01

energy, resources (cont.)

0980-02
1000-07
1040-15
1050-03
1080-02
1510-21
1550-04, 07
1650-13
1700-13
1790-08, 09
1830-04
1840-03, 04
1920-01
1930-03
2030-03
2060-18
2200-11
2510-03
2590-04
2650-02
3030-18
3070-07
3150-29
3200-16, 17
3530-02
3690-09, 10
3750-09, 42
3920-07
3980-02

environment

0030-01, 10
0090-09
0130-03
0180-01
0290-07, 10, 14, 15
0300-11, 15
0330-03
0350-01, 02, 03, 04, 05
0360-02, 03, 11
0380-01, 09, 10
0400-01
0410-15
0450-01
0510-01
0540-14
0560-12, 14, 16, 17
0610-08
0660-02
0700-05, 06
0750-02
0760-10, 11
0900-03
0950-10
0990-01, 02, 04
1030-08, 09
1040-03, 09, 17
1050-01, 02
1070-04, 06
1080-03
1100-08, 14, 24
1160-01
1180-12
1270-02
1330-04
1460-11
1510-03, 06, 11, 16
1550-02
1560-11
1570-32, 34, 37, 48
1630-04
1640-16
1650-05, 16
1680-03
1700-01
1790-05, 12, 20, 21
1820-04
1830-02, 05
1840-08
1930-04
2050-09, 19
2080-01
2150-02, 03
2200-08, 25
2220-28
2250-07
2340-03
2440-03
2450-01, 03
2460-04, 05, 10, 12
2470-07, 08
2500-01
2510-05
2530-02
2570-02
2580-13
2600-04, 05
2690-01
2710-05, 06
2800-02
2860-02
2900-07
2930-04
3030-19, 28

environment (cont.)

3100-02, 03
3120-04
3200-19
3260-03, 04, 06
3300-01
3340-02
3350-03
3430-10, 11
3530-03
3540-04, 08, 09
3560-02, 03
3640-02, 03
3690-04, 05, 06, 07, 08
3750-01, 02
3940-09

management, administration

0260-06
0410-05
0590-01, 09
0610-02, 04, 15
0950-03
1810-02
1930-06
2110-01
3260-14

marine affairs, oceans

0110-03
0220-02
0360-09
0870-02
3150-34
3710-01, 02
3750-28, 34, 36, 37, 38, 39

transportation

0570-07
0630-02
1100-22
2220-01
2590-01
2670-02, 06
3310-01

urban affairs

0110-02
0410-12
0540-07
0630-01
0700-11
0960-01
1100-16
1470-01
1780-07
1790-01
1930-10
2050-08, 21
2080-02
2220-17
3030-02
3540-13
3750-21
3920-22

SOCIOLOGY, STRUCTURE, ORGANIZATION, PROCESS, ETC.

General Science/Technology

0030-06
0270-13
0390-05, 08
0410-02, 03
0450-02
0470-04
0480-04
0530-04
0540-01
0560-04, 19, 22
0580-15
0590-04, 05
0630-07, 08
0770-01
0870-09
0900-05
0920-04
0950-08
1020-05
1070-10, 12
1100-26, 37, 39
1270-01
1380-01
1390-02
1420-03, 04, 06, 14, 17, 18
1430-04
1470-02
1550-06, 16
1560-15, 24, 26
1570-21, 22, 24, 25, 27, 28, 31, 36, 41
1580-01

General Science/Technology (cont.)

1700-03, 06, 11
1730-01
1930-13
2010-01
2050-07, 23
2060-05
2080-04
2170-01
2180-01
2190-05
2200-02
2220-24, 25
2260-01
2340-02
2400-15
2470-04
2480-03
2490-11, 13
2620-03, 06, 10
2670-13, 14
2690-05
2760-08, 09, 11
2820-05
2930-02
3020-03, 12
3030-10
3150-14, 35, 38
3250-04, 10, 11, 12, 17
3260-23, 24, 25, 26, 28
3430-03
3540-01
3570-03
3730-11
3750-25, 32
3870-01
3920-20

Life Sciences/Biotechnology

0290-02
0560-08
0570-05
0580-01
0740-03
1420-02
1550-14
1560-10, 16, 25
1980-04
2010-03
2050-06
2400-13
2600-14
3240-04

Social Sciences

0130-04, 06
0530-02
1100-38
1420-19
1450-24
1790-14, 17, 26
1840-07
2010-02
2190-06
2580-18
2620-05, 08
3150-12
3250-05
3260-03
3240-05

Special Topic Areas

biomedical ethics/problems

0580-03

communications, computers, and cybernetics

0430-05
3020-11

environment

0170-01
0560-17
2050-09
2400-11
3200-22

management, administration

0590-06, 07
0950-03
1930-06

urban affairs

3920-22

SPECIAL PROBLEMS, SELECTED TOPICS, CASE STUDIES, ETC.

General Science/Technology

0250-06
0260-10, 17
0390-07
0560-20
0580-16
0620-04
0870-04
1030-04
1430-05, 07
1440-08
1650-03
1660-01, 02
1670-02
1770-07
1790-15
1840-05
1930-01, 05, 12
2050-02, 03
2190-08
2220-02
2250-08
2270-05
2470-03
2490-04, 05, 08, 09, 10
2580-06
2600-06
2900-02, 03
2910-01
2940-03
3030-07, 08, 09, 27
3050-03
3200-03
3320-06
3350-05, 06
3360-01
3560-05, 10
3610-05
3630-02
3690-01, 18
3720-04
3750-10, 12, 22, 23, 25
3920-09, 13

Life Sciences/Biotechnology

1000-08
1450-19
1550-05, 12
1560-04
1610-04
1890-08
1920-04
1980-07
1990-01
2050-14
2210-04
2220-30
2250-10
2690-02
3050-01

Social Sciences

0260-11
0570-04
2570-05

Special Topic Areas

agriculture, food

1310-01
3150-43

arms control, national security, etc.

0070-05
0270-01, 02
0380-10
0560-21
0590-14
0760-01, 02, 03
0900-02
1000-03
1510-22
1550-01
1560-20, 27
1570-04, 05, 06
1610-06
2220-18
2600-11, 12
2690-07
2710-07
3320-11
3690-13
3750-18, 29
3940-06

biomedical ethics/problems

0600-06
1550-08, 09, 10, 21
2180-05
2630-01

communications, computers, and cybernetics

2490-06, 07
3020-11

education, media, public understanding

1100-29
1930-11

energy, resources

0270-06, 16
0280-03, 11
0290-06
0300-03
0360-07, 08
0430-08
0500-01
0640-01
0700-12
0840-02
0870-06
0900-01
0930-02
0980-05
1000-07
1030-03
1040-02
1100-25
1150-01
1200-01
1330-02
1460-13
1510-09, 13, 17
1550-11, 13
1570-08, 17
1630-01
1640-02, 04, 06
1650-13, 14
1700-13
1790-02, 08, 11, 13
1830-04
1930-09
2030-03
2050-22
2060-18
2100-01
2180-03
2200-11, 13
2270-07
2430-02
2450-04
2490-03
2520-03
2530-02
2580-02, 05
2590-07
2700-02
2750-01
2810-02, 04
2820-01
2960-04
3010-02
3020-06, 07
3030-18, 21
3070-05, 07
3120-05
3200-07
3250-02
3580-01, 02
3610-03, 04
3620-02
3660-03
3690-10
3730-09
3750-09, 13, 14, 26

environment

0390-02
0410-08
0560-12
0750-02
0760-09
1250-02
1510-05, 10, 15, 16
1550-02
1570-48
1640-03
1790-24
2010-07
2050-04, 05, 15
2200-14
2260-02
2680-01
3020-08, 10
3130-02
3750-03

management, administration

0590-06, 07
0610-04
1570-46

marine affairs, oceans

0360-09
3690-07
3710-01, 02
3750-28

transportation

0360-12
1640-09
2590-01, 05
3030-11
3320-03

urban affairs

1720-05
2620-09
3920-02

RESEARCH INDEX

SAMPLE ITEM IN RESEARCH INDEX

institution
code #   research #
2360-03

To locate this item in the text:

1. Go to faculty research interest section (ID).
2. Locate institution code number (find 2360 between 2350 and 2370).
3. Under institution 2360, find research interest designated r03 (find r03 between r02 and r04).

For further explanation of the arrangement of the research index, see page xiv, "How to Use This Guide."

ECONOMICS, BUSINESS, DIFFUSION OF INNOVATIONS

0130-02
0270-05
0470-02
0760-04, 05, 12
0950-12, 13
1570-17
1780-04
1790-03, 07, 08
1920-01, 02
1930-04, 06
2010-06
2170-01
2200-09
2250-01
2270-06
2470-02
3030-06
3120-01
3150-02
3200-05
3430-01
3490-01
3690-03
3720-01, 02
3750-12
3980-03

Special Topic Areas

agriculture, food

1930-09, 14

communications, computers, and cybernetics

0270-07
1560-03

energy, resources

0760-09
1510-05
1560-07
1570-09, 16
1920-03
2620-04
2690-01
2740-01
2880-02
3690-05
2750-14

marine affairs, oceans

0580-08
3750-05, 06

transportation

0630-02
0660-03
0760-10
1040-04
2470-03

GENERAL OR CULTURAL IMPACT

0070-03
0270-02
0480-04
0580-03
0660-01
0760-07, 08
0780-04
0840-01
0950-14
1020-03
1040-01
1340-01
1570-14, 15
1770-01
1780-01, 02, 13
1890-02
2050-03
2170-02
2210-01
2230-01
2270-03
2300-01
2480-02
2490-01
2620-03
2740-03
2810-02
3090-02
3260-01
3510-02

GENERAL OR CULTURAL IMPACT (cont.)

3550-01
3750-09
3980-03

Special Topic Areas

agriculture, food

2220-18

biomedical ethics/problems

0070-08

communications, computers, and cybernetics

1930-02, 03
2130-03
2200-02

education, media, public understanding

2220-07, 19
2480-01
3200-01, 07

energy, resources

0730-01
0760-14
0900-03
1040-03
1930-10, 11
2050-04
2740-02
2900-01
3090-01

environment

1280-01
1330-01
1360-01
1510-04
1630-02
1780-03
1930-07, 08
1930-13
1940-03
2210-02
2360-01
2510-02
2670-02
2980-01
3200-02
3350-02

marine affairs, oceans

3350-01

transportation

0280-05
0900-02
0950-11
2050-01
2670-01
2690-02
2820-01
3430-06

urban affairs

2200-01
3690-07

FORECASTING, TECHNOLOGY ASSESSMENT, FUTURES

0260-01
0280-09
0610-01
0630-03
0670-02, 04
0760-12
1070-02
1110-02
1570-22
1830-01, 03
2050-02
2130-01
2400-01
2460-01
2470-01
2810-03
2830-01
2940-02, 03
3030-09
3420-02
3750-11

Special Topic Areas

communications, computers, and cybernetics

0260-02
0410-01, 02
2220-05

education, media, public understanding

3430-04
3950-01

energy, resources

0410-03
2690-03
2900-02, 03, 04
3030-03
3430-02

environment

1040-02

transportation

0950-05
1110-01

urban affairs

0670-03

HISTORY

0070-01
0100-01
0140-02
0270-04, 05, 06
0280-01, 02, 03
0480-01, 03
0580-02, 04, 05
0760-02
1020-03, 05, 06, 07
1420-01, 02, 03, 04, 05, 07, 08, 09
1440-01
1570-04, 12, 13, 14, 18, 19, 21, 22
1840-01, 02, 03, 04
1890-01
1940-02
2050-05, 06, 07, 08, 09
2200-05
2210-03
2220-20
2270-02
2300-01
2350-03
2490-01
2620-01
2760-01, 02, 03, 06, 07
3030-01
3250-01, 02, 03, 04
3310-01, 02
3730-01, 02, 03, 04
3800-01

Special Topic Areas

education, media, public understanding

2760-04

INTERNATIONAL ASPECTS, TECHNOLOGY TRANSFER

0360-01
0470-01
0610-02
0650-01
0670-02
0760-05
0900-04
0950-07, 10, 14
1090-04, 07
1180-01, 02, 07, 08
1510-06
1560-09
1570-02, 07
1930-05
2170-01
2220-01, 13, 15, 16
2400-03
2760-07
3140-01
3150-02
3250-04
3750-01

Special Topic Areas

agriculture, food

1570-10

arms control, national security, etc.

0270-01
1510-07

education, media, public understanding

3150-01

energy, resources

1180-03, 04, 05
1560-07, 08
1570-06
2220-09
3020-01
3690-04, 06

environment

1180-06
1930-12

marine affairs, oceans

1090-05
3350-03

transportation

2220-14

LAW, LEGAL ASPECTS

0040-02
0370-01
0530-01
0570-01
1460-01
1890-03
3030-05, 07
3080-01
3430-07
3510-02
3710-01
3810-01

Special Topic Areas

communications, computers, and cybernetics

1050-02

energy, resources

0430-01, 02
2200-06

environment

0040-01, 03
1030-03
1050-01

marine affairs, oceans

0580-07

transportation

2200-08

LITERATURE, ART

0140-01
2270-01
2350-02
2400-01
3190-01
3860-01

PHILOSOPHY, RELIGION, ETHICS, VALUES

0270-03
0280-11
0340-01
0390-01
0580-01
0600-04, 06
0670-01, 05
0720-01, 02
0780-03
0990-01
1030-01
1420-03, 04, 08, 09, 10
1560-05
1570-20
1610-01, 02

PHILOSOPHY, RELIGION, ETHICS, VALUES (cont.)

1630-01
1810-02
1830-03
1940-01
1980-01, 02, 03, 06
2010-01, 02
2050-10, 11, 12, 13, 14
2220-02, 04
2400-02, 03
2490-02, 04, 05
2580-01
2810-01
3200-04, 06, 08
3230-01
3330-01
3540-05
3660-02
3730-03, 05
3810-01
3930-01, 02, 03
3980-02

Special Topic Areas

biomedical ethics/problems

0370-02, 03, 04
0600-01, 02, 03, 05, 07, 08
0630-01
1020-01, 08
1460-02
1980-04, 05
2270-05
2350-01
3420-01
3510-01

education, media, public understanding

2220-03

energy, resources

2090-01, 02

environment

3200-03

POLICY, SOCIO-POLITICAL ASPECTS, DECISION MAKING

0030-01, 02
0070-02, 04, 05, 09
0120-01
0280-04, 06, 07
0370-01
0470-03
0560-01
0610-01
0670-01
0720-01
0760-06
0950-03
0980-01
1070-01
1090-02, 03, 09
1570-01, 03, 04, 08
1630-01
1790-03, 04, 06, 09, 10, 12
1810-01, 02
1830-02
1890-03
1930-04, 06
2080-01
2110-01
2130-01
2220-01, 06, 08
2270-04, 07
2540-01
2760-07
2810-01
3030-06
3060-01
3140-01
3150-10
3430-03, 07
3690-02
3720-01
3750-03, 08, 12
3980-01

Special Topic Areas

agriculture, food

0380-01
1090-08

arms control, national security, etc.

0070-06
0360-03
1560-06, 10
1570-05
1790-02
2220-10
3660-01

communications, computers, and cybernetics

0270-07
0410-05
1560-04
1570-11
1790-01, 05

education, media, public understanding

3200-09

energy, resources

0250-01
0280-08
0380-02
0450-01
0580-06
0760-11, 13
1000-01, 02
1330-02
1510-01, 02
1570-23
1790-05
2200-06
2220-17
2670-03
2900-05, 06
2940-01
3030-02, 08
3540-04
3690-01
3750-10

environment

0290-01, 02
0320-01
1510-08
1550-01
1650-01, 02, 03
1830-01
2130-02
2220-21
2510-01
2690-04
2930-01
3030-01, 04
3750-13

management, administration

0410-04
0950-08

marine affairs, oceans

0360-02
0580-07
3710-02
3750-07

transportation

2690-02
3540-02, 03

urban affairs

0660-02
3540-01

SOCIOLOGY, STRUCTURE, ORGANIZATION, PROCESS, ETC.

0130-01
0270-06
0280-10
0480-02
0660-04
0760-01, 03
0780-01, 02, 03
0950-02, 04, 06, 07, 09
1020-04
1090-06
1560-11
1570-13
1700-01
1790-11
2010-04, 05
2050-08
2170-03, 04
2200-03, 04
2220-11, 12
2490-03
2500-01

SOCIOLOGY, STRUCTURE, ORGANIZATION, PROCESS, ETC. (cont.)

2620-02
2880-01
2940-04
3730-04
3750-02, 04

Special Topic Areas

communications, computers, and cybernetics

1560-02

management, administration

0950-01

INDEX TO RESEARCH, GOVERNMENT, AND PROFESSIONAL INSTITUTIONS

Agency for International Development 397
Agricultural Development Council, Inc. 443
American Association for the Advancement of Science 415
American Bar Association 416
American Chemical Society 417
American Federation of Information Processing Societies 418
American Institute of Aeronautics and Astronautics 418
American Institute of Physics 418
American Medical Association 419
American Nuclear Society 420
American Philosophical Association 420
American Physical Society 420
American Political Science Association 421
American Psychological Association 422
The American Scientific Affiliation 422
American Society for Engineering Education 423
The American Society for Environmental History 423
American Society for Public Administration 423
American Society of Civil Engineers 424
American Society of Mechanical Engineers 424
American Sociological Association 424
The Arca Foundation 443
Archives of Institutional Change 383
The Arms Control Association 435
Aspen Institute for Humanistic Studies 383
Association for Computing Machinery 425
Battelle Memorial Institute 384
Biophysical Society 425
The Brookings Institution 384
Center for Advanced Study in the Behavioral Sciences 385
Center for Policy Research, Inc. 385
Center for Science in the Public Interest 435
Committee for Social Responsibility in Engineering 436
The Commonwealth Fund 443
The Council for Philosophical Studies 386
Council on Environmental Quality 397
The Camille and Henry Dreyfus Foundation, Inc. 444
Energy Research and Development Administration 397
The Environmental Defense Fund 436
Environmental Protection Agency 398
Federal Power Commission 399
Federation of American Scientists 436
Federation of American Societies for Experimental Biology 426
The Ford Foundation 444
Forecasting International 386
The Futures Group 387
History of Science Society 426

Holcomb Research Institute 387
Hudson Institute, Inc. 387
Institute for the Future 388
The Institute of Ecology 388
The Institute of Electrical and Electronics Engineers, Inc. 426
Institute of Food Technologists 427
Institute of Medicine 400
Institute of Society, Ethics and the Life Sciences 389
Institute on Man and Science 389
Institute on Religion in an Age of Science 428
Inter Future 390
The International Council for Science Policy Studies 428
International Federation for Information Processing 429
International Society for Technology Assessment 429
Charles F. Kettering Foundation 445
Library of Congress 399
Eli Lilly and Company Foundation 445
Arthur D. Little, Inc. 390
The John and Mary R. Markle Foundation 445
Metrics, Inc. 391
Milbank Memorial Fund 446
National Academy of Engineering 400
National Academy of Sciences 400
National Aeronautics and Space Administration 401
National Conference of State Legislatures 401
National Endowment for the Humanities 402
National Research Council 400
National Resources Defense Council, Inc. 437
National Science Foundation 402
National Sea Grant Program 405
National Technical Information Service 405
Office of Technology Assessment 406
Organization for Economic Cooperation and Development 406
Philosophy of Science Association 429
Pope John XXIII Medical-Moral Research and Education Center 391
Rand Corporation 391
Research Corporation 446
Resources for the Future 392
Rockefeller Brothers Fund 446
Rockefeller Family Fund 447
The Rockefeller Foundation 448
Russell Sage Foundation 448
Science for the People/Scientists and Engineers for Social and Political Action 437
Scientists Institute for Public Information 437
Alfred P. Sloan Foundation 448
Smithsonian Institution 407
Society for Health and Human Values 392
The Society for the History of Technology 430
Society for Industrial and Applied Mathematics 430

Society for Social Responsibility in Science 438
The Society for Social Studies of Science 430
Stanford Research Institute 393
Syracuse University Research Corporation 394
Union of Concerned Scientists 438
United Nations Educational, Scientific and Cultural Organization 408
U.S. Arms Control and Disarmament Agency 408
U.S. Department of Agriculture 408
U.S. Department of Defense 409
U.S. Department of Housing and Urban Development 409
U.S. Department of the Interior 409
U.S. Department of Transportation 410
U.S. House of Representatives 410
World Future Society 431
Worldwatch Institute 394